INCORRECT

OHIO CULTIVATOR.

A Semi-Monthly Journal of Agriculture and Horticulture.

VOL. 3. COLUMBUS, OHIO, SEPTEMBER 15, 1847. NO. 18

OHIO CULTIVATOR.

(Published on the 1st, and 15th, of each Month.)

M. B. BATEHAM,
EDITOR AND PROPRIETOR.

TERMS:

Single Subscriptions, or any number less than four, One Dollar each per year. Four copies, ordered at one time, (they need not be to one address,) Three Dollars, and at the same rate (*seventy-five cents each*) for any larger number—payments in all cases to accompany the orders.

No subscriptions received for less than one year, and all must commence with the first number of a volume.

Letters enclosing current bills, in accordance with the foregoing terms, may be sent at the expense and risk of the publisher.

Address M. B. BATEHAM, Columbus, O.

Cattle Shows and Fairs in Ohio--1847

Ashtabula County, at Jefferson, October 13th.

Clark and Madison, at South Charleston, October 7th and 8th.

Cuyahoga County, at Newburgh, Oct. 13th.

Clinton County, (District Fair,) Wilmington October 20th.

Clermont County, (Tp. society,) at Franklin, October 1st and 2d.

Geauga, ——— when?

Greene County, at Xenia, October 8th and 9th.

Guernsey County, at Cambridge, October 28th.

Hamilton County, at Carthage, September 9th, 10th and 11th.

Lorain County, at Elyria, Oct. 6th and 7th.

Mahoning County, ——— when?

Medina County, ——— when?

Miami County, at Troy, Sept. 24th.

Ross County, at Chillicothe, Sept. 30th.

Trumbull County, at Warren, Oct. 13th and 14th.

Washington County, at Marietta, Oct. 20th.

☞ A number of other County Agricultural Societies in the State have announced their intention to hold exhibitions this fall; but we have not seen the time and place stated. If notices thereof have appeared in our exchanges, we have overlooked them owing to their not being marked with a pen.

The Pittsburgh Horticultual Society will hold its annual exhibition on the 22d, 23d, and 24th insts.

The Cleveland Horticultural Society will hold their Annual Fair and Exhibition at Empire Hall, on Thursday, September 16th. Your invitation came too late, gentlemen.

Annual Fair of the American Institute.—The twentieth annual exhibition of this institution, will commence at Castle Garden, in the city of New York, on the 5th of October next. The show of cattle and other live stock will commence on Wednesday, October 13th, and close on Thursday, the 14th.

The Cincinnati Horticultural Society will hold their annual exhibition on the 23d and 24th September. The Society have politely invited the Columbus Horticultural Society to attend.

Union County, (not "Mercer,") Ag. Society.—In our paper of June 15, p. 95, we gave a notice of the formation of an agricultural society, with list of officers &c., purporting to be at "St. Marys, Mercer county"—it should have read *Marysville, Union county.*—We don't *know how the mistake occurred.*

Marrietta Female Seminary.—We invite the attention of parents and others, to the advertisement of this institution on last page. It has become extensively known as one of the best seminaries in the land; and from what we know of the principal and teachers, and the community in which it is located, we are sure it deserves all the popularity it has obtained.

Description of the "Water Ram."

In the "American Journal of Agriculture," for June, and in the "Horticulturist," for August, we find descriptions (with engravings,) of the Water Ram, in its several forms, mostly taken from Ewbank's excellent work on Hydraulics. We copy from the first named work the following extracts which we think will afford our readers a pretty correct idea of the construction of this very useful and curious machine, and the principle upon which it operates. It will be seen from a notice in our last paper, that one of these machines has been put in successful operation in the neighboring town of Springfield, in this State, and that a mechanic of that place is prepared to put up others if wanted. We hear also that Messrs. Farnham & Co., of Cincinnati, are prepared to furnish and put in operation the machines. We shall expect to see several of them at work in Columbus before many months. We know of quite a number of situations about town where they could be used with great advantage, in furnishing a supply of water for use, and for ornamental fountains.

Our friend Alex. Waddle, of Clark county, will find the water ram just the thing he needs for forcing the water from his fine spring, up the hill to his barn and proposed dwelling house. Many other farmers that we know of, might use the machine with great advantage, for supplying water to their cattle yards and dwelling houses.

Among all the devices or contrivances for conveying water from a lower to an upper level, nothing as yet has been discovered equal to the Hydraulic Ram. It is a very ingenious and effective machine for raising water by its own impulse, and comes nearer to a *perpetual motion* than any other machine that has fallen under my notice.

If a column or body of water, moving rapidly under a head, through a pipe, is suddenly checked, its tendency is to burst the pipe. This is well known in all places where there are water-works, from the bursting of leaden supply-pipes, where these are not strong enough, on the sudden shutting off the hydrant cocks. If a small hole is made in the pipe, just above the cock, the water will escape from it in a very high jet, much higher than the head, whenever the cock is shut. It is this principle which is brought into action in the hydraulic ram. If a small straight upright pipe is attached to the hole, just mentioned, in the main pipe, having a valve shutting downwards, which will permit the water to pass upwards, but not to return, each opening and shutting of the cock will force up into the smaller pipe a quantity of water in proportion to the head upon the main pipe, until the weight of the water in the smaller pipe is greater than can be moved by the *momentum* of the water in the main pipe, when the latter is suddenly closed.

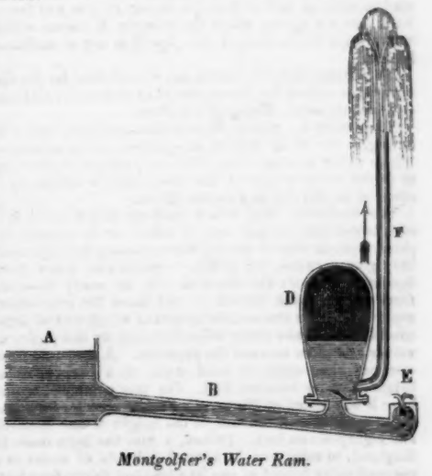
Every person accustomed to draw water from pipes that are supplied from very elevated sources, must have observed, when suddenly closed, a jar or tremor communicated to the pipes, and a snapping sound, like that from small blows of a hammer. These effects are produced by blows which the ends of the pipes receive from the water—the liquid particles in contact with the plug of a cock, when it is turned to stop the discharge, being forcibly driven up against it by those constituting the moving mass behind.

Waves or the sea act as water-rams against rocks or other barriers that impede their progress; and when their force is increased by storms of wind, the most solid structures give way before them.

The increased force water acquires when its motion is accelerated, might be shown by a thousand examples. A bank or trough that easily retains it when at rest, or when slightly moved, is often insufficient when its velocity is greatly increased. When a deep lock of a canal is opened to transfer a boat or vessel to a lower level, the water is permitted to descend by slow degrees. Were the gates opened at once, the rushing mass would sweep the gates before it, or the greater portion would be carried in the surge quite over them, and perhaps the vessel also. A sluggish stream drops almost perpendicularly over a precipice; but the momentum of a rapid one shoots it over, and leaves a wide space between. It is so with a stream issuing from a horizontal tube. If the liquid pass slowly through, it falls inertly at the orifice; but if its velocity be considerable, the jet is carried to a distance, ere it touches the ground.

That the force which a running stream thus acquired may be made to drive a portion of the liquid far above the source whence it flows, is obvious from several operations in nature. During a storm of wind, long swelling waves in the open sea alternately rise and fall, without the crests or tops of any being elevated much above those of the rest; but when they meet from opposite directions, or when their progress is suddenly arrested by the bow of a ship, by rocks, or other obstacles, part of the water is driven to great elevations.

The hydraulic ram raises water on precisely the same principles; a quantity of the liquid is set in motion thro' an inclined tube, and its escape from the lower orifice is made suddenly to cease, when the momentum of the moving mass drives up, like the waves, a portion of its own volume, to an elevation much higher than that from which it descended. This may be illustrated by an experiment familiar to most people. Suppose the lower orifice of a tube (where the upper one is connected to a reservoir of water be closed with the finger, and a very minute stream be allowed to escape from it in an upward direction, the tiny jet would rise nearly to the surface of the reservoir. It could not of course ascend higher.—But if the finger was then moved to one side, so as to allow a free escape, until the whole contents of the tube were rapidly moving to the exit, and the orifice then at once contracted or closed as before, the jet would dart far *above* the reservoir; for, in addition to the hydrostatic preaure which drove it up in the first instance, there would be a new force acting upon it, derived from the *momentum* of the water. As in case of a hammer of a few pounds weight, when at rest on the anvil, it exerts a pressure on the latter with a force due to its weight only; but when in motion by the hand of the smith, it descends with a force that is equivalent to the pressure of perhaps a ton. * * * * * *



Montgolfier's Water Ram.

Explanatian.—The above is a sectional and simple form of Montgolfier's ram. The head or motive column descends from a brook A, through the pipe B, near the end of which an air-chamber D, and raising main F, are attached to it, as shown in the figure. At the extreme end of B, the orifice is opened and closed by a valve E, instead of the cock in Whitehurst's machine before described. This valve opens downwards, and may either be a spherical one, as above, or a common spiudle one. It is the play of this valve that renders the machins self-acting. To accomplish this, the valve is made of, or loaded with such a weight, or adjustment of the spring, as just to open when the water in B is at rest; then a portion of the water will enter, and rise in F, the valve in the air-chamber preventing its return. Meantime the water in B has been brought to rest, and relieved for a moment of the pressure and rush of water, the pressure is insufficient to sustain the weight of the valve E, which drops, and reopens the outlet hole at E, when the current is again put in motion, and acquires force enough to close valve E, when another portion of the water is again forced into the air-vessel D, and pipe F; and thus the operation is repeated, as long as the spring or brook affords a sufficient supply, and the apparatus remains in order. This process, or pulsation, like the click of a clock, continues until accident or wear stops the working of the valves. The valves make from twenty-five to sixty strokes a minute. The machine is set in motion by pressing down the valve E.

[*Note.*—The annexed representation is the simplest form of the machine, and serves to illustrate the principle of its construction. A number of improvements have been made upon it of late by American mechanics, and the form is somewhat varied, but the principle is the same in all. In the above cut the "raising main" F is represented as a fountain at play; but it usually consists of a pipe leading from the machine at the spring or brook, up to a dwelling house (or the top of the house if desired) at a distance of perhaps several hundred feet, with a perpendicular elevation of 50 or 100 feet. See remarks at close of this article. The "driving pipe" B is usually from 15 to 30 feet long, and has a descent of from 4 to 12 feet, according to the amount of fall and the supply of water to be obtained, and the capacity of the machine desired. See remarks at close of this article.]

The surface of the water in the spring or source, should always be kept at the same elevation, so that its pressure against the valve E may always be uniform; otherwise the weight of E would have to be adjusted, as the surface of the spring rose and fell.

As the ascending column of water communicates with the air in the reservoir D, this would soon be exhausted, if a fresh supply or portion of air were not introduced at each stroke of the ram. Thus when the flow of the water through B is suddenly stopped by valve E, a partial vacuum is produced immediately below the air-chamber, by the recoil of the water, at which instant the small valve at B, in Fig 3, opens, and a portion of air enters, and supplies that which the water absorbs. In small rams, a sufficient supply is found to enter at the valve E.

Air-vessels are indispensable to the permanent operation of these machines. Without them the pipes would soon be ruptured by the violent concussion consequenon the sudden stoppage of the current of the motive column. The air being elastic, breaks the force of the blows.

This beautiful machine may be adapted to numerous locations in the country. When the perpendicular fall from A to the valve E, is but a few feet, and the water if required to be raised to a considerable height through F, then the *length* of the driving pipe B must be increased, and to such an extent that the water in it is not forced back into the spring, when the valve in E closes, which will always be the case, if the pipe B is not of sufficient length.

To Montgolfier, of France, are we indebted for the discovery, or rather the improvement of this useful machine —hence its name, *Montgolfier's Ram.*

The device by which Montgolfier made the ram self-acting, is one of the neatest imaginable. It is unique.—There never was any thing like it in practical hydraulics, or in the whole range of the arts; and its simplicity is equal to its novelty and useful effects.

The hydraulic ram, when properly constructed, it is said, is not liable to get out of order, or to require repairs; lapse of time or muddy water passing through them they give occasion for trifling repairs, and when these become necessary the machine can be easily detached from the pipes and carried in one hand for convenient repairing. It is also said the height to which one of these machines can raise water is limited only by the power of valves and pipes to resist the pressure. A moderate sized one has been made to send water to a perpendicular height of three hundred feet. On this principle, works have been erected at Marley, in France, which raised water in a continuous stream, to the height of one hundred and eighty-seven feet. Indeed, a ram has been made in England, to raise one hundred hogsheads of water to a perpendicular height of one hundred and thirty-four feet, in twenty-four hours, with a head of only four and a half feet.

There are two rules for ascertaining how much a given stream of water will raise. First, find how many times higher the water is to be raised than the fall of the driving power; then by adding an 0 to the number, and dividing by 7, you can ascertain the number of gallons that will be required to force up a single gallon of water.

Second, "measure the amount of water discharged by the stream in a given time. Ascertain the greatest amount of head or fall that can be obtained, and the elevation to which the water is to be raised. Then divide the elevation by the head or fall, and the amount of water by the quotient. Deduct 30 per cent. from this result and it will give the amount delivered in the given time. For example, suppose an elevation of sixty feet, with a fall of five feet. The supply four gallons per minute, or five thousand seven hundred and sixty gallons per day.

Then 5)60—12; then 12—2760—480; deduct 30 per cent., which leaves 336 gallons per day.

If the machine is properly made and put up, it is said this rule may be depended on."

The simplicity of the machine and its operation, proves its effectiveness as well as its durability, and shows the very small amount of attention and repairs it will require to keep it in order. The ram and pipes should of course be laid under ground, beyond the reach of frost.

The very small expense of a ram, and pipes necessary to work it, being in most cases less than that of a wheel and pump, are strong inducements to adopt it in preference.

Persons wishing Rams sent to them—by measuring the amount of water (unless the supply is unlimited) their brook or spring affords per minute, the head or fall they can procure, the elevation to be overcome, and the distance to be conveyed—can have the proper Ram and pipes sent them, with directions for putting it up.

The water ram is quite an old invention, but recent improvements have rendered it more practical and less expensive than formerly. We believe it is not covered by any Patent at this time, except it may be Benson's improvement, which differs from the foregoing in having one or two extra valves, and being designed for elevating pure water from a spring by means of a stream of impure water.

We are not able at the present time to give particular information in regard to the cost of the machine, expense of pipe, &c., but will do so before long. (Perhaps Mr. Swimby, or Messrs. Farnham & Co., will inform us.)

Protection of Fruit.

In a recent letter from our friend, Hon. James Mathews, of Coshocton, he says:

"We have found in the article published in the last number of your paper, the best remedy yet known here for fruit stealers and garden robbers. The *tartar emetic* works finely! A good doze will lay a fellow out limber for a while, as the sad experience of some here amply proves. It also clears out the stomach, prevents chills and fever, and gives a distaste which very much diminishes the thieving propensities. I have no doubt whatever that an expense of a few shillings judiciously applied in this way, would break up the fruit stealing business in any neighborhood.

A Chapter on Apples.

Every body loves good apples, and this is the season when all our readers are more or less interested in deciding upon the merits of different varieties of this fruit.—Then, too, there is to be a *Fruit Convention* assembled at Columbus on the 29th of the present month, and this will give additional interest to the following "chapter on apples." In the transactions of the New York State Agricultural Society for the past year, we find an able report of a committee appointed the year previous for the purpose of making "a selection of the best varieties of apples for domestic use and exportation to be cultivated in the State of New York." The report embraces a description of thirty varieties, most of them well known standard fruits, and such as are found well adapted to that climate. Some of them are in very general cultivation in Ohio, and seem well adapted to the soil and *climate* of some portions of the State. Others have not yet been fairly tried; and some have been tried and found of little value.

Appended to the report are some very judicious remarks on the subject of apples and fruit culture generally, which we will here insert for our readers, and then give a few of the descriptions with several engravings:

The undersigned consider the cultivation and growth of the apple in the United States as a subject of great and increasing importance. The apple is, indeed, altogether the most important of our fruits; and now become, by long use in its adaptation to edible purposes, not only in its natural condition, but through the various branches of cookery, a necessary article of domestic consumption with a large portion of our inhabitants, besides being a most grateful luxury to all who know its value and enjoy its flavor. It has also become an important article of export to Europe, the West Indies and South America; and it must soon become, with the increasing commercial facilities in which our people are engaged, an article of export to the countries beyond the Cape of Good Hope. The apple orchard is, consequently, an item of national wealth, yielding large annual returns to our agriculture, and repaying in the most bountiful degree, all the care, and labor, and solicitude, which its pains-taking cultivators may expend upon it. As such, it is worthy all the attention with which the State Agricultural Society regard it, and its future increase and prosperity will richly reward all the efforts which may be made in its encouragement.

Fortunately for us, the apple, in many of its varieties, and in great perfection, thrives in almost every part of our great State; and with proper cultivation, yields bountiful crops. Its favorite latitude, we consider lies between 40 deg. and 44 min. north; and between these ranges, flourish probably the best specimens the world has ever produced. As a testimony to the excellence of some of our New York soils for its production, it may be stated that the very best and most popular variety known in Europe, the Newton pippin, originated in our State; and several others of equal value for domestic uses, have had their origin with us. It therefore well becomes the people of our noble State to encourage its cultivation to the utmost, and also the State Agricultural Society to offer every inducement for further progress in developing the acknowledged excellence of its varieties.

The undersigned, however, would but feebly discharge their duties towards this important subject, did they fail to impress upon our fruit growers, the manifest necessity of cultivating the best, and only the best varieties; and to discourage, by all possible means, the careless and imprudent practice, too often prevailing, of growing inferior kinds, when, with trifling expense and care, the best can be produced equally well, and to infinitely more advantage, both in an economical and pecuniary view.—The expense of rearing and cultivating inferior fruits is hardly less than that of the best, while the one is almost, and in many cases absolutely worthless, and the other in the highest degree profitable; and to secure the best, it is only necessary, on the part of the cultivator, to properly understand the subject, and to appreciate the surprising difference between good and bad varieties.

The undersigned are well aware that great fraud and impositions have been, and are continually practised by empirics in fruit culture, who annually traverse the country as "grafters," and in their indiscriminate employment by many of our farmers and orchardists, often shamefully impose upon their employers by inserting worthless varieties in their trees, which are only detected after years of painstaking solicitude on the part of the cultivator, who has either then to abandon his blighted expectations altogether, or renew his orchards with well selected fruits, after so dearly paying the penalty of his ignorance, or his inattention. To guard against this bad practice is one object of the labors of this committee, and to impress upon the attention of every fruit grower the most diligent care in the selection of his fruits, as well as in their future cultivation. And although circumstances may oblige many orchardists to employ itinerant grafters to do their work, they should always be sure, either from their own personal selections, or from the selections of those upon whom they can rely, that they obtain what they really require. Hence the necessity that every one who cultivates fruit, should, to a considerable extent, understand the subject. This committee are familiar with instances in which the above named practice has resulted in a second, and even a third grafting before the desired fruits were obtained, wearing out the time of almost one generation of man, a source of continued chagrin, mortification and suspense, all which might have been saved with a slight knowledge of the subject. Such occurrences, the undersigned cannot too earnestly urge our orchardists to prevent.

Thriving in almost any description of soil which will produce the grains and grasses of our climate, the apple is a rapid grower, and with but trifling care, ultimately arrives at maturity, against disadvantages under which almost any other fruit would perish. It is among the trees *natural* to our climate and soil; and in almost every habitable portion of our State, that husbandman who neglects its culture is heedless of his own interest, and regardless of one of the great articles of family comfort, and cheap luxury; and in its omission is guilty of disregarding one of the choicest bounties which a kind Providence has placed within his reach; and we cannot but regard him, who, blessed with the opportunity, neglects the cultivation of good fruits, as one derelict in duty, both to himself, to society and to his posterity.

The committee have been charged by the State Agricultural Society with the selection of not exceeding thirty varieties of apples, which shall, in their opinion, be best adapted for domestic consumption and exportation, as an article of profitable cultivation; and although the committee do not consider that so many varieties as are here enumerated are necessary, or perhaps advisable for the profitable cultivation of every orchardist, they are aware that in some sections of the State, certain descriptions of apples are of easier and more perfect cultivation than in others; and in the list which they offer, they trust that among so many, there will be more or less of them found, which will develop all their excellence in some one locality. Apples, like all other productions of the earth, have their favorite soils, altitudes, and climates, out of which they scarcely pay the expense of cultivation. Yet, it is believed, that in the list reported, there are some which will thrive in almost every section of the State, and produce a remunerating crop to the cultivator. This result, a *trial* must determine. But he must be a slow observer, who cannot by observation, compare his own advantages of soil, altitude, and climate, with those on which, a variety sought, exists in luxuriance, and make selections accordingly.

Any variety of apple, to be worthy of extensive cultivation, should be, as nearly as possible, perfect of its kind. Some are quite so. A positively good apple should possess the following qualifications:

1st. The wood of the tree should be hardy and vigorous in its growth, spreading in its shape, graceful in its appearance, and an abundant and annual bearer.

2d. The fruit should be uniformly distributed over the tree, not in clusters, but with a strong stem holding it

firmly to the limb, and not subject to fall in ordinary high winds.

3d. The size should, as near as may be, range from small medium, to moderately large; such usually combining higher flavor, and sounder quality than the quite small, or the extraordinarily large varieties. A very small apple is apt to be astringent; a very large one, coarse and spongy. The flesh of a perfect apple should be solid, heavy, juicy and brittle. It should be, also, brisk in its flavor, which should be always agreeable, whether that flavor be tart, sub-acid, or sweet.

4th. Its shape should be fair, of agreeable appearance, small in the core, and delicate in its skin.

Such qualities constitute a perfect apple; and the varieties we have chosen, in the names reported for consideration, mostly possess these qualities in an eminent degree.

In addition to the approbation which the list selected claims from the undersigned, they are warranted in their opinions by the general popularity of these fruits where they are best known in their favorite localities, and where long use has stamped their excellence too firmly to be questioned. The principal qualities regarded, are their superiority for the table and the kitchen, and in the case of the winter fruits, that of long keeping. As *exclusively* a cider fruit, the committee have paid it no attention; as for all necessary purposes of that article, a decidedly superior table and kitchen apple will make the best of cider.

Aside from its edible uses to man, the apple is an important and economical food for most kinds of farm stock. Milch cows thrive upon it when fed in moderate quantities, and it adds to the quantity and quality of their milk. They are also an excellent food in making beef. Horses eat them readily; for them they constitute a succulent and healthy food. Sheep, swine, and geese will fatten altogether on good apples; and for all kinds of poultry they are desirable and nutricious food. The best varieties, too, are comparatively as valuable for stock feeding, as for market purposes; and for stock feeding alone, the best varieties of both, sweet and acid, should be cultivated. Indeed, for stock feeding solely, no cheaper, more convenient, or valuable *green* food can be grown, for fall and winter forage, than the apple; and as such, it is strongly recommended to the general farmer. They are as easily housed and preserved from frost, as the root crops, and equally convenient for ordinary feeding.

It is a source of pleasure to remark, that all among the varieties of the apple which have passed under the view of the committee, the best are those of American origin; and those, decidedly the best our climate affords, and which have attained the most deserved popularity abroad, are seedlings of the United States, although many superior kinds have been introduced here from Europe. The prices of the best American apples in London and Liverpool markets, are usually five to ten dollars a barrel; much depending on their kind, the manner in which they are put up, and their sound keeping qualities.

The varieties of apple which the undersigned have selected, and recommend to the society under the resolution of 1846, is as follows:

Summer.—Early Harvest, Early Strawberry, Large Yellow Bough, Early Joe, and Williams' Favorite, all which are summer apples.

Fall.—Fall Pippin, Golden Sweet, Gravenstein, Jersey Sweeting, Porter, and Rambo, Detroit Red, Bellebonne, for autumn uses.

Winter.—Baldwin, Yellow Belle Fleur, Hubbardston Nonsuch, Johnathan, Newtown Pippin, Northern Spy, Blue Pearmain, Rhode Island Greening, American Golden Russet, Roxbury Russet, Swaar, Ladies' Sweeting, Talman's Sweeting, Esopus Spitzenburgh, Vandervere, Waxen Apple, Westfield Seeknofurther, for winter use and exportation.

So numerous are the names and synonymes of many of our best apples, that for a full understanding of the subject, the committee append such descriptions of each of the above named kinds, with the several synonymes by which they are differently known, as will render them familiar to the public. In this branch of their labors, they are highly favored in having access to the admirable treatise on "The Fruits and Fruit Trees of America," by A. J. Downing, of Newburgh, N. Y., a gentleman among the most eminent of American pomologists, and whose work they take especial pleasure in recommending to the attention of every fruit grower in our country. The descriptions are thus prefaced in a note appended to them in his work:

"In describing apples, we shall designate the size by comparison, as follows: Small, as the English Golden Pippin, [and Early Strawberry;] medium size, as the Newtown Pippin, [and Boston Russet;] large, as the Yellow Bellflower and Fall Pippin, [and Esopus Spitzenburgh;] as we consider this reference to a standard, generally known, better than an exact description by measure, owing to the variation in different soils and seasons. The blossom end, apex, or crown of the fruit, is called the *eye;* but we shall, for the sake of precision, call the remains of the blossom still found there the *calyx*, and the the hollow in which it is placed the basin."

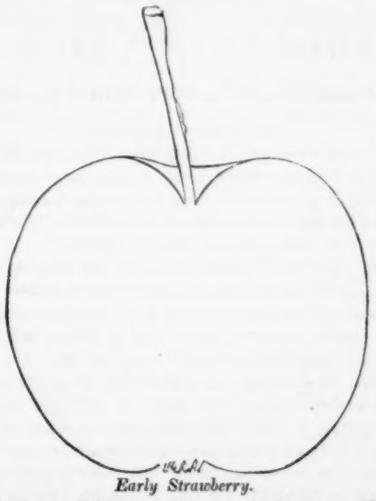
The foregoing remarks in regard to size and terms used in descriptions of apples, we think may afford servicable hints to those who contemplate attending the proposed convention at Columbus, or who design to write descriptions of fruits.

DESCRIPTION OF VARIETIES.

Of this portion of the report we shall only extract at present *four sorts* of well known reputation, and which are well known in this State. The engraved outlines, and the terms used, will serve as guides to those who may wish to describe apples for the convention, or other purposes. (These descriptions are copied from Downing's work on Fruits.)—ED. O. CULT.

EARLY STRAWBERRY APPLE.

A beautiful variety which is said to have orignated in the neighborhood of New York, and appears in the markets there about the middle of July. Its sprightly flavor, agreeable perfume, and fine appearance, place it among the very finest summer apples. It is quite distinct from the Early Red Margaret, which has no fragrance, and a short stem.



Early Strawberry.

Fruit roundish, narrowing towards the eye. Skin smooth and fair, finely striped and stained with bright and dark red, on a yellowish white ground. Stalk an inch and a half long, rather slender and uneven, inserted in a deep cavity. Calyx rather small, in a shallow, narrow basin. Flesh white, slightly tinged with red next the skin, tender, sub-acid, and very sprightly and brisk in flavor, with an agreeable aroma.

RAMBO.

The Rambo is one of the most popular autumn fruits to be found in the Philadelphia markets. It is a highly valuable apple for the table or kitchen, and the tree thrives well on light sandy soils, being a native of the banks of the Delaware.

Fruit of medium size, flat. Skin smooth, yellowish white in the shade, streaked and marbled with pale yellow and red in the sun, and speckled with large rough pots. Stalk long, rather slender, curved to one side, and deeply planted in a smooth, funnel-like cavity. Calyx closed, set in a broad basin, which is slightly plaited around it. Flesh greenish white, very tender, with a rich,

Rambo.

sprightly, sub-acid flavor. October to December. This apple resembles externally the American Domine, which, however, is a very late-keeping winter fruit.

ESOPUS SPITZENBURGH.

The Esopus Spitzenburgh is a handsome, truly delicious apple, and is generally considered, by all good judges, equal to the Newtown Pippin, and as a desert fruit, unsurpassed by any other variety. It originated at Esopus, a famous apple district, originally settled by the Low Dutch, on the Hudson, where it is still raised in its highest perfection. But throughout the whole of New York, it is considered the first of apples, and its beauty and productiveness render it highly profitable for orchard culture. The tree has rather slender shoots, and when in bearing, has long and hanging limbs.

Fruit large, oblong, tapering roundly to the eye. Skin smooth, nearly covered with rich, lively red, dotted with distinct yellowish russet dots. On the shaded side, is a yellowish ground, with streaks and broken stripes of red. Stalk rather long, three-fourths of an inch, and slender, projecting beyond the base, and inserted in a wide cavity. Calyx small, and closed, set in a shallow basin, which is slightly furrowed. Flesh yellow, rather firm, crisp, juicy, with a delicious rich, brisk flavor. Seed in a hollow core. December to February. [November to December, in Ohio.]

Letter from Capt. Gillet.

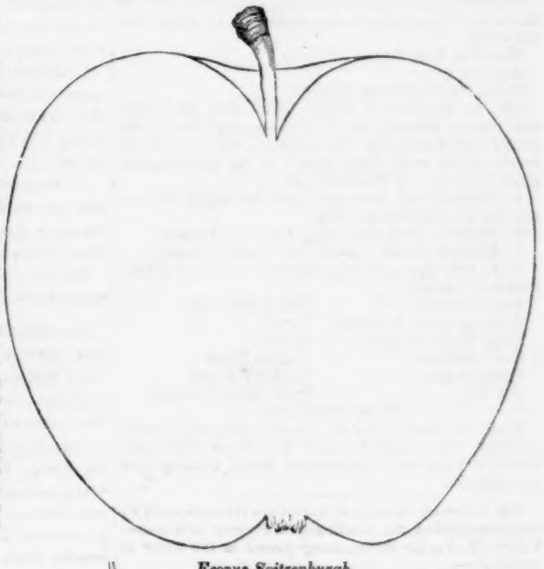
ERRORS CORRECTED—THAT CORN STALK—COOPER APPLE.

MR. BATEHAM:—You are right—I did not mean to say the corn-stalk was seven inches in "diameter," but in circumference—quite a difference, I admit, but still large enough to be hard to beat. There is another small mistake in the same article; it should read Cable and Mason counties, *Virginia*—not "Kentucky." Our county, Lawrence, borders about equal distance on Virginia and Kentucky.

COOPER APPLE TREES.—Another mistake—in the Cultivator of March 1st, page 38, speaking of the bark of the young trees of the Cooper Apple I am made to say it frequently presents a "scaly" appearance.—Now there are many sorts of apple trees whose bark is scaly; but the Cooper is actually scabby, particularly when young.—The bark becomes callous to the wood, in small spots, causing indentations on the surface of the trunk, from which a fluid or sap oozes, staining the bark quite black for some inches below each scab. The young trees may easily be distinguished by these marks, and I am thus particular in describing them, in the hope it may lead to a knowledge of the name by which this fine apple is known in the eastern States.

H. N. GILLET.

☞ Rev. H. W. Beecher is about to remove to New York—not to Boston as stated in our last.

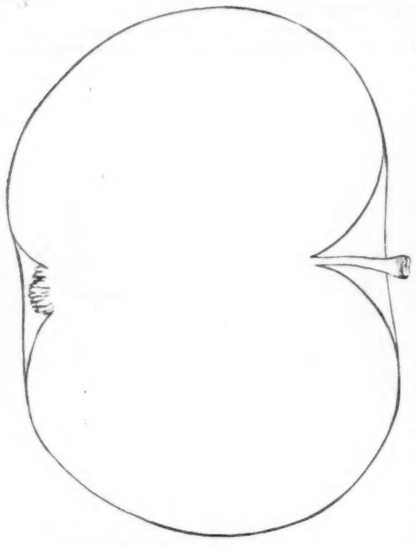


Esopus Spitzenburgh.

BOSTON OR ROXBURY RUSSET.

This Russet, a native of Massachusetts, is one of the

most popular market fruits in the country, as it is excellent, a prodigious bearer, and keeps till late in the spring. It is in every way, highly deserving extensive cultivation.



Boston or Roxbury Russet.

Fruit of medium size, often large roundish, a little flattened, and slightly angular. Skin at first dull green, covered with brownish-yellow russet when ripe, with, rarely, a faint blush on one side. Stalk nearly three-fourths of an inch long, rather slender, not deeply inserted.—Calyx closed, set in a round basin, of moderate depth.—Flesh greenish-white, moderately juicy, with a rather rich, sub-acid flavor. Ripens in January, and may be brought to market in June.

There are several native varieties of Russet or "Leather Coats," of larger size than the foregoing, but they are much inferior, being apt to shrivel and become tasteless.

From the Albany Cultivator for September.

SELECT LISTS OF APPLES.—Different cultivators, having equal acquaintance with different varieties, will not agree in selection; there are a few sorts, however, which all will agree in pronouncing fine. Such sorts, may, therefore, be more confidently recommended to the novice, than those about which good cultivators will differ. A man who knows well a hundred different kinds, of reputation, by selecting a very few, will hardly fail to get such only as are truly valuable.

B. V. FRENCH, one of the most eminent cultivators of the apple in New England, gave the following as the six best apples, for early, medium, and late or winter ripening:

Early Harvest,	Rhode Island Greening,
Porter,	White Seeknofather,
Fameuse,	Baldwin.

Another eminent New England cultivator, gave for the three best apples, summer, autumn, and winter, the following:

Williams' Red, Porter, Baldwin.

Another gave:

Early Harvest, Porter, Baldwin.

Stephen H. Smith, of Rhode Island, who has grown and tested a hundred and fifty kinds, says that all the winter apples raised in New England, are not worth as much as the three kinds named in the following list, given by him in the *Horticulturist:*

1. *Rhode Island Greening:* first for health of tree, bearing, keeping, and cooking.
2. *Baldwin:* good for bearing, table, and keeping.
3. *Roxbury Russet:* good for bearing and keeping.

A. J. Downing gives the following select list of thirteen hardy apples:

Early Harvest,	Jersey Sweeting,
American Sum. Pearmain,	Porter,
Large Yellow Bough,	Baldwin,
Red Astrachan,	English Russet,
Summer Queen,	Roxbury Russet,
Fall Pippin,	Rode Island Greening,
Yellow Bellflower.	

It will be observed that the last list embraces all in the preceding lists, except Williams' Red, White Seeknofarther, and Fameuse. These added would make sixteen fine varieties. T.

The following varieties of apples are recommended by the committee of the Horticultural Society of Genesee Valley, N. Y., the names being placed in the order of ripening:—

SUMMER APPLES.

Early Harvest, Early Strawberry, Red Astrachan, Sweet Bough, or Yellow Bough, and Golden Sweet.

FALL APPLES.

Early Joe, Porter, St. Lawrence, Jersey Sweeting, Gravenstein, Fall Jenneting, and Holland Pippin.

WINTER APPLES.

Twenty Ounce, Fameuse, Red Canada, Peck's Pleasant, Yellow Belle Fleur, Swaar, Talman's Sweeting, Rhode Island Greening, Esopus Spitzenburg, Baldwin, Green Sweeting, Northern Spy, Roxbury Russet, and Yellow Newtown Pippin.

OHIO CULTIVATOR.

COLUMBUS, OHIO, SEPTEMBER 15, 1847

The Fruit Convention.

TO BE HELD AT COLUMBUS, SEPT. 29th, AND 30th.

We have good reason to believe that this convention will be very numerously attended, and that it will prove the most useful assemblage, in its relation to Horticulture, ever convened in the Western country.

We again urge all nurserymen, and fruit growers, who can possibly do so, to attend, and to bring with them one or more fair average specimens of all the approved grafted apples, pears, and other kinds of fruit to be found in their neighborhoods or sections of the State; with the names by which they are known; also all new or seedling varieties of fruit that may have originated in this country, with a particular history and description of the same; and each person should come prepared to give verbally to the convention as full information as possible in regard to the varieties of fruit he exhibits, both old and new, founded on experience and observation in the region where he resides—the nature of the soil climate &c., being also stated—so as to show the effects of location, soil, climate, &c., on the different varieties of fruit, and thereby enable persons to decide what varieties are best adapted to particular places and for particular purposes.

To correct the erroneous names which abound among nurserymen and fruit growers, should also be a primary object with the convention, and each member should come prepared to contribute all in his power towards this object, in whatever manner it may be thought best to conduct proceedings for the purpose. To this end we would advise all who possess books describing fruits, printed catalogues, &c., to bring them with them to the convention, for reference.

Competent reporters or secretaries will of course be appointed, to take notes of the discussion and remarks that may be made, and measures will be adopted for publishing a full report in such form as will be generally useful.

☞ Persons desiring to send specimens of fine fruit, who are unable to attend themselves, can send by some friend, or direct by stage or otherwise, to the care of BELA LATHAM Esq., at the office of the Ohio Stage Co.

The convention will be held in the Hall of Representatives in the State House.

THE HORTICULTURAL EXHIBITION in this city last week was a more splendid affair, by far, than most of our citizens had anticipated; and gave such evidence of IMPROVEMENT as must be gratifying to all. The display of fruits, especially of peaches, was remarkably fine, notwithstanding the season has been somewhat unfavorable for *quality.* Of grapes too there was a fine show, though many were not quite ripe. Apples also, were abundant and handsome; and pears, plums, &c., as good as could be expected for the season. But the admiration of *all* was the brilliant display of ROSES, and the tasteful manner in which the floral portion of the exhibition was arranged by the LADIES, without whose aid the society would utterly fail. We regret that owing to the temporary absence of the Secretary we are not able to give an official report of the exhibition in this number of our paper. It will be published in the city papers as soon as he returns and it can be prepared.

SPLENDID PEACHES.—We challenge the whole world to produce larger and handsomer peaches than were exhibited at our Fair, of SEEDLINGS too, raised in the vicinity of COLUMBUS! Specimens of the Vandemark Seedling (from seed of the Lemon Cling,) a remarkably handsome fruit, deep yellow flesh, fine red outside, measured *over a foot* in circumference! One weighed 14 ounces, and four together weighed 2 pounds and 14 ounces. Several very fine seedlings were also exhibited by Mr. Sites, also by Mr. Burr, and by Mr. Lazell.

CHOICE ROSES.—Not much less than one hundred varieties of the choice new kinds of roses, were exhibited by Messrs. Buttles, Burr, Doherty and others—particulars in our next.

TALL CORN.—We exhibited at the horticultural Fair last week corn stalks 14 feet high, grown on our "little farm"—upland clay soil, formerly a *brickyard,* moderately manured and SUBSOIL PLOWED.

Our neighbor of the Statesman has a corn stalk a foot and a half longer than ours—but grown, we believe, on rich bottom land.

THE WEATHER has been quite cool of late, with one or two frosts, but not sufficiently severe to kill late corn, except in cold places. The corn crop is ripening finely. The potatoe rot is destroying most of the potatoes in this region, except those planted early.

"LIME AND LIME KILNS" will be attended to in our next—also "Sheep and Dogs," "Fattening Pork," "Dairy Management," &c.

TO COUNTY AGRICULTURAL SOCIETIES.—We notice that several societies have already appointed delegates to attend the annual meeting of the State Board of Agriculture in December. We advise all to do so at the time of their approaching fairs, or other meetings. If your Representatives in the Legislature are first rate men for the purpose, appoint them; if not, send a good man on purpose, especially if the distance is not very great. Remember there will be one half of the members of the State Board to elect at the annual meeting.

"THE OHIO HARMONIST" is on our table, and shall be noticed in our next, provided we can find time to sing a portion of its contents. Several new exchanges, and other publications are also awaiting for examination and notice. We are in hopes to procure some assistance in this department of our labors before long.

PEPPER MINT OIL.—A writer in the Syracuse N. Y. Journal, states that more peppermint is used for oil in Wayne county, N. York, than in all other parts of the Union; also, that a company of manufacturers of the oil from New York have recently purchased all the manufacturing establishments and the growing mint crops of that region, and bound the former operators not to engage in the business for a certain number of years; for all which they pay the sum of $200,000.

Pretty large story that. What say our Lorain and Erie county mint growers? We have understood from Mr. Swift, that the business was not found very profitable, owing to fluctuation in the price, and other causes.

Steubenville Horticultural Society.

This society appears to be progressing with a good degree of spirit. At a meeting held last month it was resolved to hold the annual exhibition and fair on the 23d and 24th insts., (Sept.,) on which occasion there is to be a grand horticultural dinner, also an address, &c. Premiums will be awarded on choice fruits, flowers and vegetables exhibited at the fair. The society also offer the following premiums to be awarded within five years for seedling fruits raised in Jefferson county:

Apples—for the best, which shall excel any now in cultivation, of the improved kinds, for *keeping*						$30 00
Do.	do.	do.	do	early,		20 00
Pears,	do.	do.	do.	keeping,		30 00
Do.	do.	do.	do.	early,		20 00
Peaches—for the best cling which shall excel any now cultivated,						10 00
Do.	do.	do.	free	do.	do.	10 00

The following gentlemen have been elected officers of the society for the ensuing year:

President—John D. Slack.

Vice Presidents—T. J. Ware, Jas. Powell, John Johnston.

Corresponding Secretary—Abner L. Frazer.

Recording Secretary—J. G. Morris.

Treasurer—Robert Speer.

Executive Committee—John Eberlein, John Linduff, J. L. Holton, James Alexander, and John Barr.

That Wheat and Chess! Head.

Wonderful Case of Transmutation!—The remarkable head of wheat brought to our notice by the Goshen and Salem Farmers' Club in Clermont county, and said to have "seven perfect grains of chess growing out of it," has been sent to us through the kindness of Mr. Armstrong, on whose land it was found. It reached us in perfect condition, sealed up very securely in a small box. We broke the seals and took out the head in the presence of Mr. Joseph Sullivant of this city, who is well known as a botanist, &c., and requested him to examine it. The wheat head was of perfect form and well ripened, and at its base there was a spikelet containing "seven grains of perfect chess," sure enough, which at first sight appeared to have grown out of the wheat head. But on close inspection, and on carefully removing the grains of wheat behind which it was fastened, it could at once be seen that *the chess spikelet had* no connection *whatever with the wheat head*, but was merely caught by its thread-like stem between the chaff and stem of the wheat head, and had there broken off, probably in harvesting. We have replaced the chess, firmly as before in another place on the head; and it can be seen at our office by any who desire to inspect it; or we will return it to Mr. Armstrong if he has any further use for it. The donation of books which we promised the club, we conclude will not be claimed just yet.

A head of grain similar to the foregoing, but more of an imposition, was once presented to us at Rochester, when we had offered a large reward for proof of the absurd notion that wheat will turn to chess.

Hamilton Co. Fair.—We learn from those who were present, that this Fair has been better attended, and a better feeling and more spirit manifested, than for years past. We hope this is only an earnest of better days and times for our farmers. When every farmer shall feel it to be a solemn *duty*, as well as his interest, to make his son a *scientific, educated* farmer, then he may pursue his business *intelligently*, and hence *profitably*, and take his stand among educated men of *any* profession.—*Cincinnati Gazette.*

Franklin Agricultural and Horticultural Society—Clermont County.

Saturday Evening, Aug. 28, 1847.

Society met pursuant to adjournment.

On motion, James Ferguson and John Hancock were elected to deliver addresses the first day of the Fair, to be held at Franklin school-house, on the 1st day of October next.

The Society then went into a discussion upon the propriety of establishing Agricultural schools. The question was ably handled; it was taken up by men deeply versed in Agricultural lore The deformities of the present system of education were pointed out, and remedies proposed. The discussion was one of those rarely met with, in which tact, talent, and experience combine to create an interest that does not fail to arouse every dormant energy.

On motion, Charles Robb was elected to deliver the occasional address at the next meeting, which will be on the 25th of September.

CHARLES ROBB, *Sec'y pro tem.*

A Profitable Cow.

Mr. Bateham:—The following statements I think will show conclusively that the cow is a valuable animal:

"*Old Red*," for the last twelve years has yielded us on an average not less than twelve quarts of milk per day, for ten months in each year; which amounts in the aggregate to no less than 9120 gallons, or 300 barrels, for the twelve years; and if sold at the low price of two cents per quart, it would make the sum of $864,00, or sufficient to buy forty-three cows of like good quality at $20 each. And now if "Old Red" has not sufficiently compensated her owners, we can fatten her this fall and make her yield $25,00 more in beef, hide and tallow.

Wheat and Chess.—Till this year I always regarded the idea of wheat's turning to chess as all moonshine.—But this season, finding quantities of chess growing where clean, *clean* wheat was sown, and on examination finding wheat and chess actually growing on the same root(?) now of course I am a believer in transmuation.

A Tenant Farmer.

Rootstown, Portage Co., O., 1847.

Remarks.—Why do not some persons send us specimens of these compound chess and wheat roots? We never yet could procure a *real* specimen of the kind for love nor money, and shall not believe such were ever discovered till we see them.—Ed.

LADIES' DEPARTMENT.

Receipts in Domestic Economy.

Mr. Editor: Rather than you should again be obliged to revert to so sour a subject, to fill the "Ladies' Department" of your deservedly popular paper, I will send you a few receipts, which you can insert, or not, at pleasure.

Mock Oysters, of Corn.—Take a dozen and a half ears of young corn, and grate all the grains off the cob as fine as possible. Mix with the grated corn three large table spoonfuls of sifted flour, the yolk of six eggs well beaten. Let all be well incorporated by hard beating. Have ready in frying pan an equal proportion of lard and fresh butter. Hold it over the fire till it is boiling hot, and then put in portions of the mixture as nearly as possible in shape and size like fried oysters. Fry them brown, and send to table hot. They should be near an inch thick. In taste it has a singular resemblance to fried oysters. The corn *must* be young.

Tomato Honey.—To each pound of tomatoes allow the grated peel of a lemon and six fresh peach leaves. Boil them slowly till they are all to pieces, then squeeze and strain them through a bag. To each pint of liquid allow a pound of sugar and the juice of one lemon. Boil them together half an hour or till they become a thick jelly. Then put it into glasses, and lay double tissue paper over the top. It will scarcely be distinguishable from real honey.

Rice Cakes.—Pick and wash half a pint of rice, and boil it very soft. Then drain it and let it get cold. Sift a pint and a half of flour over the rice, and mix in a quarter of a pound of butter and a salt spoonful of salt. Beat five eggs very light, and stir them gradually into a quart of milk. Beat the whole hard, and bake in muffin rings, or waffle irons. Send to table hot, and eat with butter, honey or molasses.

Quince Cheese.—Have fine ripe quinces, and pare and core them. Cut them into pieces and weigh them, and to each pound of the cut quinces allow half a pound of the best brown sugar. Put the cores and parings into a kettle with water enough to cover them, keep them covered closely. When you find they are all boiled to pieces and quite soft, strain the water over the sugar, and when it is entirely dissolved, put it over the fire and boil it to a thick syrup, skimming it well. When no more scum rises, put in the quinces, cover them closely, and boil them all day over a slow fire, stirring and mashing them down with a spoon till they are a thick smooth paste. Then take it out, and put it into buttered tin pans or deep dishes. Let it set to get cold. It will then turn out so firm that you may cut it into slices like cheese. Keep it in a dry place in broad stone pots. It is intended for the tea table.

Cannot some of the "sisterhood" tell us how to make "nice good" pumpkin butter?

Respectfully, &c.,

Melrose, Brown Co., O., Sept., 1847. Mary.

Soda Coffee.—The flavor of coffee may be improved by adding forty to fifty grains of carbonate of soda to each pound of roasted coffee. In addition to improving the flavor, the soda makes the coffee more healthy, as it neutralizes the acid contained in the infusion.—*Exchange paper.*

Substitute for Lamp Oil.

Mr. Bateham:—The following receipt for preparing a composition for burning in lamps, is being sold extensively in Ohio, Pennsylvania, and other States. If valuable it ought to be generally known, and if not, the sooner the imposition is exposed, the better. H.

"*A Composition to burn in Lamps, superior to oil or gas.*—To one gallon of alcohol add one quart spirits of turpentine, shake or stir in a can or bottle till completely mixed and of a milk-and-water color, then add 2 ounces pulverized gum camphor, or a sufficient quantity to restore the composition to the natural color of the alcohol—it is then fit for use. Fill your lamp about two-thirds full, and put the tube in a cork well fitted, with a cotton wick long enough to receive the composition. It will burn clear, without smoke or unpleasant smell, and without consuming the wick."

Remarks.—The foregoing composition is of the kind called *spirit gas*, which was extensively used a few years ago in most of the cities and towns of the eastern States, but has been gradually going out of use of late owing in a great degree to the numerous accidents that have occurred from explosions and the extreme combustible nature of the composition, rendering its use highly dangerous to the lives of those who use it. We advise our readers to avoid alcohol in all its shapes.—Ed.

Immigration at the Port of New York.

A New York paper gives the following as the amount of immigrants to that port alone up to the 31st of July last. What the number is that has arrived at other ports during the same time, and those that cross from Canada, we have not seen stated, but the amount must be very great:

Number of *steerage* passengers who arrived at this port in vessels from the various countries of the old world, in the twelve months from 1st Aug., 1846, to 31st July 1847, as compared with those in the twelve months from the 1st of Aug., 1845, to 31st July, 1846.

	Twelve months ending 31st July.	
	1846.	1847.
British ports	54,226	88,733
French ports	15,732	26,770
Hausetowns, (Bremen and Hamburgh,)	12,887	15,525
Belgium	4,303	13,128
Holland	2,430	5,076
Sweden and Norway	1,133	2,021
Prussia	118	274
Spain	13	1
Italy, Sicily and Sardinia	204	114
All other ports	334	465
	91,280	152,116

The above embraces merely *steerage* passengers. The "better class," the cabin passengers—the cigar and champaigne gentry—are not estimated.

Growth of Indian Corn.—The hot weather of the last fortnight has almost doubled the growth of corn. A man in Amherst noted the growth of a single stalk during three hot days last week, as follows: first day, 6 inches; second 5½; third, 5; total, 16½ inches in three days.—*Springfield, Mass., Republican.*

Last season, we measured corn for many days in July, in the town of Wheatland. Five inches in 24 hours was the largest growth noted. All vegetable physiologists concur in saying that plants give out carbonic acid at night, and absorb oxygen; and leave it to be inferred that they do not grow except during the light of day. We found, however, that corn and a grape-vine increased in length quite as fast from 8 P. M. to 4 A. M., as during any portion of the sixteen hours from 4 A. M. to 8 P. M.

Few are are aware how much water a hill of growing corn will throw off from its long and broad leaves during a hot day in July. During this rapid evaporation, not a particle of the mineral matter taken up into the circulation with the water that enters the roots escapes with the vapor into the atmosphere. When these minerals exist in the soil in due proportion to meet the precise wants of the organizing tissues, such organization, in favorable weather, goes ahead at a cracking rate. To feed living corn-plants judiciously, is a point in agriculture not sufficiently understood.—*Rochester Am.*

Notes of a Trip North.

(*Concluded from last No., page* 126.)

Commencement of Oberlin Collegiate Institute.—This is the second time we have been present at the the annual commencement exercises of this institution. On both occasions we found a very large attendance of persons from all parts of northern Ohio, and some from a greater distance. The spacious church, which is calculated to hold a larger congregation than any other in the state, was crowded to its utmost capacity—containing, it is believed, not less than 3,000 persons—while hundreds were unable to gain admission. The interest manifested on these occasions, and the fact that the institution is every year filled to overflowing with students, afford good evidence that the Oberlin Collegiate Institute has taken a deep hold of the sympathies of the people, and is exerting a powerful influence on the public mind, notwithstanding the unfavorable prejudice which some persons cherish against it.

Of the public speaking and other exercises at commencement, we have not room to speak in detail. Suffice it to say, they were of such a character as we think could not fail to give all who heard them very favorable impressions in regard to the instruction and mental discipline afforded by the institution. Of the particular school of theology connected with the institution we have nothing to say; but there are some features in the organization and regulations of the college, that as an advocate of education, we feel bound to notice and commend.

It is emphatically the People's College.—Its whole arrangements and economy are such, that any and every young man who possesses industrious habits and a thirst for knowledge, can have that thirst gratified by obtaining a liberal education, where he is not made to feel that *poverty* and *labor* are a disgrace.

It elevates labor. By the rules of the institution, and daily examples of the President, and all the Professors

and Teachers, together with those of the five hundred hundred students, each one is made to feel that LABOR IS HONORABLE, and *idleness* is a *disgrace*, to the rich as well as the poor.

IT ELEVATES THE FEMALE CHARACTER.—We believe it is the only institution in the land, where females are allowed the same privileges, and receive the same honors as the other sex. If any of our readers have doubts respecting the capacities of the female mind, or the use that young ladies will make of these advantages, we can only wish that they had attended with us the commencement exercises of the past two years. The addresses and compositions of the graduating classes of young ladies in both of their departments, were of such an order as we think would have convinced the most skeptical on these points.

There are, however, some things in regard to which we think great improvement might be made, by the faculty at Oberlin; and we hope the suggestions will not be deemed impertinent. In our opinion, what are commonly termed the *natural and practical sciences* should have a larger share of attention in their course of education. Besides natural philosophy, chemistry, botany, and physiology, for which provision is now made. The important science of *geology* ought certainly to be included, and also the principles of *mechanical science* and *technology*, or knowlege of the arts.

Another defect in the system of education here as well as in all our colleges, is a neglect of systematic *physical education*. The mind is stimulated and excited to its utmost capacity, but too little care is bestowed on the healthful growth and perfect developement of the body. Look at the mass of graduates of our colleges, and how few of them, especially the mentally gifted ones, enter upon the high duties of life with sound and vigorous bodily health. And of what avail is an educated mind compelled to live in a ruined and diseased body?

The manual labor system at Oberlin, it is true, remedies this evil in part; but from the appearance of the majority of the students, we are convinced it is *only* in part; and the greatest improvement the faculty could adopt would be to build a *gymnasium*, and require the students to practice a regular system of gymnastics, in connection with their daily study and labor. In fact no college or academy should ever be without this appendage.

Another very necessary improvement at Oberlin, and one which could be made without expense, is, the *planting of more trees* about the college buildings, grounds and walks. There is no reason why Oberlin should not be as celebrated for its beautiful trees and shaded walks, as is the "city of elms," where old Yale is located; and how much it would contribute to the cheerfulness and health of the students, as well as the pleasurable associations connected with the recollections of the place throughout after life.

Whin, Gorse, Furze.

In the 8th No. of Colman's European Agriculture, is a somewhat of a lengthy article on this small, prickly, evergreen shrub. A new variety called French furze has been introduced into England, and is found to be a most valuable feed for cattle and horses in winter, and has the extraordinary quality of being very productive, even on poor, dry land. An evergreen plant adopted to our climate, like this furze, affording abundance of green feed in winter, it seems to me would be of inestimable advantage. Please turn to the article of Mr. Colman, and if you shall deem this plant worthy of trial here, you may consider me as engaged to take a small quantity of the seed, should you see proper to import some. I understand Mr. Colman, as saying there is a coarse furze native to England, and perhaps Ireland, to which the cultivated kind is much superior. Who can give us any additional light on this matter? E. NICHOLS.

REMARKS.—From a pretty familiar acquaintance with the plant, called *furze* in England, we have no faith that it would be found of any value in this country. In the first place, it is so coarse and thorny, that no animal can eat it until it is *crushed by grinding*, and this requires too much labor for a country like this. MR. COLMAN himself admits that "the labor required to prepare it would prove a serious objection in a country where labor is difficult to be procured." In the next place, from what we have seen of experiments to grow this plant, as a curiosity in gardens in this country, we do not believe it would be found to withstand our climate. The winters seem too changeable and severe, and the summers too hot. ED.

The Maclura, once More.

Your explanation that the Maclura is a small tree, gives me some better hope as to its success as a hedge plant. It may also be remarked that transfering southern plants north, dwarfs them; but if I recollect, it is stated that altitude or northern latitude, not only dwarfs the trees, but renders them spare or scattering. Does not Humbolt make this statement in speaking of the South American mountains? Perhaps some of our soldiers who have ascended the Cordilleras can tell. In the mean time, what is this chapparel? Is it not a prickly, evergreen shrub, adopted to hedging, and does not the height at which it grows on the mountains, indicate the possibility of its thriving here? I have little faith, however, in foreign plants—but perhaps when Mexico is joined to the United States, it will be a native—some good may come from the war. E. NICHOLS.

REMARKS.—We saw a specimen of chapparal tree, or shrub, at the garden of Mr. Hoffner, near Cincinnati last spring. It is a much less formidable looking bush than we had supposed; and we doubt whether it would prove sufficiently strong and thorny to make a good hedge plant, even if found adapted to our climate; and we do not think it would withstand our trying winters, though of this we have seen no trial.—ED.

Letter from N. Sawyier.

SHEEP FARMING ON THE PLAIN LANDS—GUADELOUPE MERINOS, &c.

MR. M. B. BATEHAM:—I was sorry that you did not come out to Wahoo to see me during the shearing, and see my flock. I was present during the whole washing and clipping operations of my flock, and attended to what I consider absolutely necessary for every Flock Master to do—the personal inspection at the time of shearing, of every sheep;—to learn its age, health, build, quality of fleece, and if a ewe, its qualities as a breeder and nurse. All these things are necessary to be known, in order to refine and advance a flock to that degree of perfection of which this animal is susceptible, and which will yield to the owner the greatest profit. This is the way the animal has been improved and advanced in Europe.

But to return to the subject of my flock, kept upon a champaign country, prairie and barrens, which has heretofore been considered as unsuitable for sheep farming.—When I commenced the growing of wool, I labored under the same impression, as to the soil; and that it would not answer to keep many sheep together in one flock.—But on reflection, and bringing common sense into play upon the subject, I was led to think that I might be mistaken; and at any rate I would test it by experiment. I accordingly went on, and my experiment has proven fully to my satisfaction, that my former impressions upon both subjects were wrong. I am fully satisfied that those champaign lands of Madison, Clark, and Champaign and Greene counties, are lands of the first order for the production of wool; and of *Merino Sheep*, with proper attention, any number may be kept together with safety. I have had together in a flock as many as 400, which were healthy and did well. Upon a critical inspection of my flocks, as they were clipped the last spring, I can say, that I have never, in any part of the United States, seen a more healthy flock.

My wool, in general, is of a long, fine, silky staple; and the *strength* of the fiber, and the soft delicacy of the touch, show the sound constitution and health of the animal.

I am increasing my flock by the introduction of the *Guadaloupe Merino* from New England. Have an additional flock now on the road, traveling all the way out by land. Very Respectfully,

NATH. SAWYIER.

Cincinnati, Sept. 1847.

To Protect Melon Patches.

MR. EDITOR:—As you have given one plan for protecting choice fruit, I send you Old Sam's plan for protecting melon patches. Old Sam lived near one of the Vermont Colleges, and was up to a thing or two. He enclosed his melon patch with a tight board fence, the end of each board resting upon the ground; placed a hollow log in the centre of the patch, and domiciled a prolific family of *Skunks* in the log, when the melons were nearly ripe. Dont you think there was a little fun about those times? The melons were safe, and the tailors got a few extra jobs. MELON.

[We suspect the remedy would be found worse than the disease.—ED.]

Potato Bugs and Rose Bugs.

MR. BATEHAM:—I send you enclosed a couple of bugs; are they the *potato bug* I see mentioned in your paper. [Yes.] If so, I have a remedy for them, and also for the *rose bug:*

Take fresh dry burnt wood ashes, and sprinkle over the potato tops, or rose bushes, (or other shrubs and vines,) as soon as the bugs appear pretty numerous, and they will soon leave. We have tried this effectually, and it may be relied on. Before we discovered the remedy, (which was made known to us by our hired man) we gathered from one to two handfulls of rose bugs from a bush- according to size.

TO PREVENT BEES FROM GOING OFF AFTER BEING HIVED, stop the entrance, (and all holes except a small crevice for ventilation,) and have the hive so arranged that you can feed the bees for two or three days, when they will have commenced work.

A YOUNG FARMER.

Crawford Co., O.

Remedy for the Grub Worm.

A subscriber in Greenfield, Highland county, informs us that he last spring discovered a large number of grub worms in sward land when plowing for corn, and set himself to work to discover some means of preventing their anticipated ravages upon the young crop; and after consulting with his neighbors, &c., he hit upon the following plan, which he thinks was completely successful:

He took one pound of roll brimstone for a bushel of corn, pounded it fine and sifted it through a fine seive, (why not use flour sulphur?) mixed it with corn and put on warm water—this made the fine brimstone adhere to the grains of corn and caused the smell to penetrate them, so that the odor seemed to remain about the root of the young plants and protect them from the worms. No injury was done to the crop where the seed was thus prepared, while in other fields near by the crop was nearly destroyed.

REMARKS.—It is well known that sulphur is obnoxious to most kinds of insects, but we greatly doubt whether the above remedy will be found of much utility, as sulphur will not dissolve in water, and it is scarcely possible that the quantity which will adhere to the grains is sufficient to effect the flavor of the stem of the young plant. It certainly will not protect them from the ravages of the *cut worm* which works on or near the surface of the ground; but if the *grub worm* eats only the remains of the seed or the root, it is possible that the remedy may be of service. We advise our friend to try it again next season if grubs are visible, and plant alternate rows without any preparation, then mark the result.—ED.

How to Decide the Chess Question.

MR. BATEHAM:—I have seen in the Cultivator of late several communications on the transmutation of wheat to chess, on which subject there appears quite a difference of opinion among farmers. Now it appears to me that any person desirous of ascertaining the fact, might easily do so, or at least, satisfy themselves upon the subject. Let them take, say 100 grains of pure wheat, or more if they choose, then take a sufficient quantity of *clean earth*, and put in a small open box, with the sides say 6 inches high, and plant the wheat therein; keep it in some secure place where birds, nor any thing else can possibly drop any chess into it, and in the winter, change it into some place where it can have a chance of a part freezing out, (also cut off the tops if they please,) and see if they can raise any chess in that way. Try it twice, thrice, or as often as they choose, until they become satisfied. If ever they succeed from raising any kind of grain from the seed of another, they will do more than I can. MERCER.

St. Marys, O.

REMARKS.—Experiments of the kind were repeatedly and carefully tried by correspondents of the Genesee Farmer ten or twelve years ago, but all of them failed to produce chess from wheat. Let the believers in transmutation test the matter for themselves, in every way that they conceive likely to produce the result, and if their theory is true, the proof can certainly be adduced.

But here comes an old friend on the opposite side, let's hear him.—ED.

How to Produce Chess from Wheat.

Take a pint of *pure* wheat, and select a spot of clean ground, (of a clayey or loamy nature,) prepare it for wheat at the proper season, and let the ground be very dry; then sow or drill half of the wheat on one half of the ground, then take a watering pot and water the whole ground till it is completely flooded, all in mud, as a very heavy rain would make it. Let it remain till just dry enough to work, then sow the other half along side of the first, and observe the difference in the crop at harvest. Remember the ground must be *very dry* when the first half is sown. Spouty cold land is the best for the experiment. I desire to warn farmers not to sow wheat when land is very dry. I learned this by experience more than twenty-five years ago, and I can find abundant evidence of the evils resulting from the practice all around me. The wheat this year is generally full of chess, but that is much the worst that was sown when the ground was very dry, and where a heavy rain formed a crust on the surface through which the young wheat came up with difficulty. This I believe was the main cause of so much wheat turning to chess. R. W.

Muskingum Co.

REMARKS.—If this was the "main cause," why did the wheat "turn to chess" quite as much on sandy and light soils where no "crust" is ever produced; as we know was the case throughout the State? The great and true cause of the appearance of so much chess, was, the killing out of the wheat by the severe and open winter.—ED.

☞Remarks on breeding horses before long.

Wheat and Chess--Transmutation.

Mr. Bateham:—One of my neighbors says that he once knew a man who cleared a field, "right in the woods," and sowed it with wheat that was *very clean*. In the spring he pastured it off, and "it *all turned to cheat*."—Another neighbor says he once mowed off a small patch of wheat in one of his fields in the spring for horse feed, and *that* patch produced a heavy crop of cheat and nothing else, while in the balance of the field there was no cheat. But I am not done yet. Mr. G. tells me that he had this season a *heavy* crop of timothy upon a field that was sown to wheat last fall. The field had never been sown in timothy, and not being near his meadow, he knows of no *possible* way that timothy could have got there. And Mr. W. says, that a few years ago, there was a small patch of elders in his meadow, which he grubbed out and sowed clean timothy seed in its place. The first crop was nothing but timothy, but this season it brought forth a heavy crop of chess. And I have myself seen this season, in several places, heavy patches of chess in meadows where it is said that chess was never seen before. Then be consistent, you believers in transmutation, and say, not only that wheat turns to chess, but that timothy turns to chess, and that wheat turns to timothy; for the two last are as easily proven as the first. And why not believe too, that *clover* turns to *foxtail?*—I sowed a field last spring with *clean clover seed*, and now instead of clover there is *tons* of foxtail. How came this? There has no foxtail grown upon the field for several years before. If wheat turns to chess, why not clover turn to foxtail?

But I have not done yet. I am now going to relate the most *wonderful change* that has ever taken place, and I stand ready to prove to the satisfaction of every *reasonable* man, *the fact*, that a great deal of my corn this season did actually *turn* into *cutworms!* R. L.

West Carlisle, Ohio, Aug. 1847.

Experiments with Different Varieties of Wheat.

By Gen. R. Harmon, Wheatland, N. Y.

From the Am. Agriculturist, for Sept.

Some of the numerous readers of the Agriculturist perhaps, may be entertained in reading a statement of the result of some of the different varieties of wheat that I have under cultivation, testing their different qualities as to hardiness and productive qualities. The ground selected for growing them is a gravelly loam, with a little sand intermixed. The plot was selected from a level field prepared for wheat, on the south side of a stone fence, three feet high, with two boards on the top; in all five feet high.

On the 18th of September, I sowed the different varieties in drills, twenty inches apart, running from the fence four rods. The wheat was covered from one to two inches deep, the ground being in good condition to bring it up.

The varieties employed may be briefly described as follows:—

No. 1.—*Wilkshire Bald*, from England two years; not hardy, only a few scattering stools in each drill, with large heads that made their appearance eight days after the common varieties.

No. 2.—*Sandoming Bald*, from Germany three years; about half of the drills near the fence stood well, the other half being about half winter-killed, their heads appearing with common varieties.

No. 3.—*Chatham Bald*, from England two years; one-third of the drills next to the fence stood well, the other two-thirds being somewhat injured by the winter. Heads large and well filled. They made their appearance with the common varieties, but are not hardy.

No. 4.—*Newsvoy Bald*, from England. This variety appears nearly the same as Chatham, but not so much injured by the winter. Bids fair to give a good return.

No. 5.—*Alabama Bald*, two years from Cincinnati, O.; one-third of the drills near the fence being somewhat injured by the winter. The remainder of the drills have but a few scattering stools. This variety much resembles the Virginia May Bald, heading at the same time, and in many respects the same.

No. 6.—*Virginia May Bald*, from Virginia ten years. This variety has not become acclimated, nearly one-half having been destsoyed by the winter. It heads one week before the common varieties.

No. 7.—*White Provence Bald*, from France eight years. This was somewhat injured by the winter, and heads three days before the common varieties. It has proved valuable for late sowing for several years past, but it has not done so well this season.

No. 8.—*Crate Wheat, Bearded;* cultivated in this section for many years. The drills were the same at one end as the other; stands the climate well. The long stiff beards are objectionable.

No. 9.—*Wheatland Red-Bald*, from Virginia May; heads with it; nearly one-half winter-killed.

No. 10.—*English Red-Chaff, Bald*. One half of the drill near the wall stood well, the other half, having but a few scattering stools, was winter-killed. It heads the same as the common varieties.

No. 11.—From Oregon last year; a beautiful white berry, very plump, and not one kernel of it vegetated.

No. 12.—*Tuscan Bearded*, from Tuscany ten years.—This variety has a few scattering stools in the drills, the winter being too severe for it. One week later than the common varieties; heads large; berry large and white.

No. 13.—*Etrurian*, from the Patent Office; a very few stools were left, the winter being too hard for it.

No. 14.—*Talavera Bald;* from England eight years; more than half winter-killed; heads large, and appeared six days after the common varieties.

No. 15.—*Mummy Wheat, Bald*, from England two years; mostly winter-killed; a few stools that put out large heads, were very late.

No. 16.—*Mediterranean, Bearded*, sown four years; somewhat injured by the winter; straw short with small sharp heads.

No. 17.—*Improved White Flint.* This valuable variety has stood against all the ills affecting the many other varieties. The drills were full from one end to the other, producing a good return. I am confident it is the most valuable of any of the varieties that I have tested.

No. 18.—*Tauland Bald*, three years from England; a few stools with large heads; nine-tenths winter-killed.

No. 19.—*Botany Bay, Bearded*, sown two years. This appears much like the Kentucky White Beard, being hardy; stands very well in the drills. The stiff beards are objectionable.

No 20.—*Hutchinson or Kentucky White Beard;* the description of No. 19 will answer for this.

No. 21.—*Anguierre Spanish, Bearded*, and imported by Mr. Townsend, of Albany, three years ago. It was somewhat injured by the winter. Straw and heads short, berry large and white. It does not appear to be suitable for this latitude.

No. 22.—One drill of thirty varieties mixed with the Improved White Flint. They were grown together for three years. They now stand well and are more than half of I. W. Flint.

No. 23—One drill of twenty-five new varieties mixed with the I. W. Flint. This drill stood somewhat scattering. I wish to see which variety will predominate, and whether they will produce a new variety.

No. 24.—*Orange*, from Virginia.

No. 25.—*Blue Stem*, from Virginia.

No. 26.—*White Bald*, from Virginia.

No. 27.—*Virginia Red-Chaff.* These four varieties are two years from Virginia; and were somewhat injured by the winter.

No. 28.—*Zimmerman's Bald Wheat*, from Maryland two years. Straw and head short, and not valuable here.

No. 29.—*Scotch Club, Bald*, from Ohio, much resembling No. 28; both varieties heading five days before the common varieties. On a strong soil they might do well.

R. Harmon, Jr.

Wheatland, N. Y., July 1847.

From the Albany Cultivator.

Chemistry Applied to Agriculture, or, what Manure does this Field Need!

This inquiry is beyond question one of the most frequent and important that presents itself to the farmer.

With the light which has, within the last few years, been thrown upon the subject of manures, their nature, and the secret of their value, something like a practical course has been revealed. It may be illustrated as follows:

If a soil fails to produce a given crop, it is because it either wants the *requisite texture*, or it wants certain essential inorganic ingredients, or it may be deficient in both.

If vegetable refuse in sufficient quantity has been strown over and plowed in, the deficiency of one or more *essential inorganic ingredients*, must be considered the solution of the failures.

Now how shall this deficiency be ascertained? How shall it be determined what a soil needs?

It may need gypsum, or phosphates, or potash, or soluble silica, or lime. It may be benefitted by ashes, or poudrette, or guano, or fish. But it probable does *not* need *all*, and would not, probably, be equally benefitted by them severally.

Which, then, shall be selected? How shall any one, without aid, be enabled to determine what will benefit his soil *most?*

The following suggestions are made in general reply to this inquiry:

Having prepared a few square yards or rods, so that the texture shall be all that is desired, let equal areas—six feet square each, for example—be accurately measured and staked. If the soil in the same field be variable, each kind may be treated for a separate experiment.

Then let equal quantities by weight, of a thoroughly pure grain, wheat, or rye, or oats, or any other it may be desired to try, be sown and covered, in these several areas. Only one kind of grain will be employed in the experiment. If others are to be tried, let separate areas be selected and prepared—a suit for each grain.

Then take small quantities of gypsum, potash, soda, ashes, bone-dust treated with diluted sulphuric acid, night soil, or any of the so called manures it may be wished to try, and put them upon or near the surface of the soil. If deeply buried, they might be dissolved by rains, and carried down beyond the reach of roots.

Now all will receive from the frost, the rains, the dew, the sunshine, and the drouth, the same treatment.—From the native soil they will derive equal measures of nutriment.

But from the added manures they will derive unequal advantage. Some of the additions will contain a desired ingredient—others will not; and the relative values will be indicated in the relative weights of the ripened grain at harvest.

The seed was weighed. The harvest must be weighed. The better manure will be pointed out in the higher weight and plumper appearance of the grain.

That the manures may be compared, and the relative profits of this or that readily estimated, positive quantities should be employed, that is, such, that by measure or weight, the cost of that used may be accurately known.

The weighing for the occasion, if not otherwise convenient, might be made with the sugar and tea scales of the nearest grocer. As the grain to be sown is, for each lesser piece of ground to be the same in weight, the quantity for one being determined, it may be placed in one scale pan, and the other parcels severally balanced against it.

There is some trouble in all this care about *quantities;* but if the conviction be deepened that a faithful attention to them is indispensable in experimentation that is to be of value, it may perhaps be more cheerfully engaged in.

It sometimes, indeed frequently, happens that farmers purchase large quantities of a given manure, because they have learned that it had been found serviceable in particular cases. They hope to reap a profit commensurate, within certain limits, with the amount of manure employed; regardless of the greater or less correspondence there may exist between the soils upon which it had been found profitable and their own. They employ it. They are disappointed. The manure does *not* contain what *their* soils need, though it may have been admirably suited to the improvement of others.

What the producer wishes in making purchases of raw material, is, to obtain as much of that which can be used, and as little of that to be thrown away, in a given quantity, as may be.

So with the grain grower. He wishes to pay for *just that* which will grow wheat, or corn, or oats. Other materials, of no service to the immediate crop, only to be washed away by rains before a seed demanding them shall be sown, he cares less to pay for.

E. N. Horsford.

Cambridge Laboratory, May, 1847.

From the Am. Agriculturist.

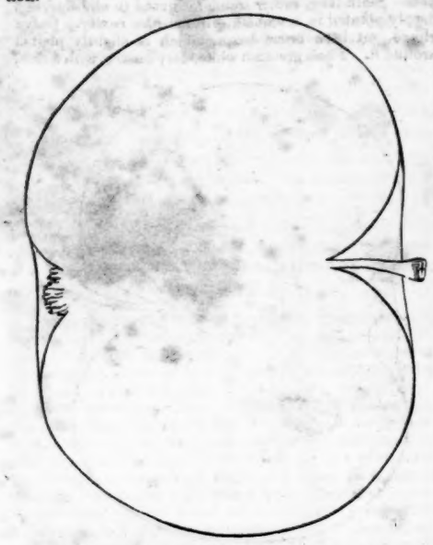
Artillery versus Agriculture.

In a short excursion made for the first time to West Point a few days since, I was highly gratified with the taste, liberality, and good judgment displayed in all the arrangements provided for the education and comfort of the future soldiers of the country. The site is one of the most beautiful, commanding, and healthful in the Union. A plain of table-land jutting into the Hudson, affords an uninterrupted view of some 15 miles on the most magnificent river in the world, covered with its floating steam and sail craft. Bold elevations hem it in upon the west, on the nearest of which, is old Fort Putnam, and still higher and more remote the remains of two other ancient redoubts, that flanked the first, while the Revolution demanded its occupation and defence. On all sides the mountains go towering up heavenward till the eye is tired of gazing on their misty tops, while around on every side, the fertile valleys and modest matronly villages seem to rejoice in the protection of the lordly hills.

The Point itself, embracing some 100 acres out of nearly 3,000 which the government owns, is tastefully laid out in groves and open fields, with walks and avenues threading them at proper intervals in all directions.—Seven or eight large, solid structures built at great expense, and filled with every thing necessary to give aid to the youthful mind, or comfort to his personal wants while in the pursuit of knowledge; and around them are commodious and pleasant abodes for those who minister to their acquirements or necessities. Some thirty professors and their aids stand ready to pour military instruction into the minds just opening upon manhood; and $400 per annum is allowed by government for each of the 250 students there for the purpose of providing liberally for every want. A large band of choice musicians is in attendance to lend enchantment to the scene, and awaken a proper enthusiasm on all occasions. Scientific apparatus, libraries, cannon, powder, balls, swords, epaulets and feathers are all carefully provided for the future heroes. Not a shoe tie is wanting, not a button or thread out of place. All is as punctiliously arranged as a bridal party or a court presentment. And all this is well. It is befitting this age and nation; and if we must have military establishments, and if still we talk of war and especially if we make it, it is entirely proper and consistent that we thoroughly educate a class of officers, capable of leading and rendering more efficient, the coarser materials of an army that is destined to deal destruction on what we term our foes.

The propriety of a similar provision for our naval establishments is equally obvious and equally regarded, by our rulers. They have secured for the nation's use, whether for offensive or defensive war, a formidable list of seventy-fours, frigates, steamers, &c., magnificently ap-

most popular market fruits in the country, as it is excellent, a prodigious bearer, and keeps till late in the spring. It is in every way, highly deserving extensive cultivation.



Boston or Roxbury Russet.

Fruit of medium size, often large roundish, a little flattened, and slightly angular. Skin at first dull green, covered with brownish-yellow russet when ripe, with, rarely, a faint blush on one side. Stalk nearly three-fourths of an inch long, rather slender, not deeply inserted.—Calyx closed, set in a round basin, of moderate depth.—Flesh greenish-white, moderately juicy, with a rather rich, sub-acid flavor. Ripens in January, and may be brought to market in June.

There are several native varieties of Russet or "Leather Coats," of larger size than the foregoing, but they are much inferior, being apt to shrivel and become tasteless.

From the Albany Cultivator for September.

SELECT LISTS OF APPLES.—Different cultivators, having equal acquaintance with different varieties, will not agree in selection: there are a few sorts, however, which all will agree in pronouncing fine. Such sorts, may, therefore, be more confidently recommended to the novice, than those about which good cultivators will differ. A man who knows well a hundred different kinds, of reputation, by selecting a very few, will hardly fail to get such only as are truly valuable.

B. V. FRENCH, one of the most eminent cultivators of the apple in New England, gave the following as the six best apples, for early, medium, and late or winter ripening:

Early Harvest,	Rhode Island Greening,
Porter,	White Seeknofather,
Fameuse,	Baldwin.

Another eminent New England cultivator, gave for the three best apples, summer, autumn, and winter, the following:

Williams' Red, Porter, Baldwin.

Another gave:

Early Harvest, Porter, Baldwin.

Stephen H. Smith, of Rhode Island, who has grown and tested a hundred and fifty kinds, says that all the winter apples raised in New England, are not worth as much as the three kinds named in the following list, given by him in the *Horticulturist:*

1. *Rhode Island Greening:* first for health of tree, bearing, keeping, and cooking.
2. *Baldwin*: good for bearing, table, and keeping.
3. *Roxbury Russet:* good for bearing and keeping.

A. J. Downing gives the following select list of thirteen hardy apples:

Early Harvest,	Jersey Sweeting,
American Sum. Pearmain,	Porter,
Large Yellow Bough,	Baldwin,
Red Astrachan,	English Russet,
Summer Queen,	Roxbury Russet,
Fall Pippin,	Rode Island Greening,
	Yellow Bellflower.

It will be observed that the last list embraces all in the preceding lists, except Williams' Red, White Seeknofarther, and Fameuse. These added would make sixteen fine varieties. T.

The following varieties of apples are recommended by the committee of the Horticultural Society of Genesee Valley, N. Y., the names being placed in the order of ripening:—

SUMMER APPLES.

Early Harvest, Early Strawberry, Red Astrachan, Sweet Bough, or Yellow Bough, and Golden Sweet.

FALL APPLES.

Early Joe, Porter, St. Lawrence, Jersey Sweeting, Gravenstein, Fall Jenneting, and Holland Pippin.

WINTER APPLES.

Twenty Ounce, Fameuse, Red Canada, Peck's Pleasant, Yellow Belle Fleur, Swaar, Talman's Sweeting, Rhode Island Greening, Esopus Spitzenburg, Baldwin, Green Sweeting, Northern Spy, Roxbury Russet, and Yellow Newtown Pippin.

OHIO CULTIVATOR.

COLUMBUS, OHIO, SEPTEMBER 15, 1847.

The Fruit Convention.

TO BE HELD AT COLUMBUS, SEPT. 29th, AND 30th.

We have good reason to believe that this convention will be very numerously attended, and that it will prove the most useful assemblage, in its relation to Horticulture, ever convened in the Western country.

We again urge all nurserymen, and fruit growers, who can possibly do so, to attend, and to bring with them one or more fair average specimens of all the approved grafted apples, pears, and other kinds of fruit to be found in their neighborhoods or sections of the State; with the names by which they are known; also all new or seeding varieties of fruit that may have originated in this country, with a particular history and description of the same; and each person should come prepared to give verbally to the convention as full information as possible in regard to the varieties of fruit he exhibits, both old and new, founded on experience and observation in the region where he resides—the nature of the soil climate &c., being also stated—so as to show the effects of location, soil, climate, &c., on the different varieties of fruit, and thereby enable persons to decide what varieties are best adapted to particular places and for particular purposes.

To correct the erroneous names which abound among nurserymen and fruit growers, should also be a primary object with the convention, and each member should come prepared to contribute all in his power towards this object, in whatever manner it may be thought best to conduct proceedings for the purpose. To this end we would advise all who possess books describing fruits, printed catalogues, &c., to bring them with them to the convention, for reference.

Competent reporters or secretaries will of course be appointed, to take notes of the discussion and remarks that may be made, and measures will be adopted for publishing a full report in such form as will be generally useful.

☞ Persons desiring to send specimens of fine fruit, who are unable to attend themselves, can send by some friend, or direct by stage or otherwise, to the care of BELA LATHAM Esq., at the office of the Ohio Stage Co.

The convention will be held in the Hall of Representatives in the State House.

THE HORTICULTURAL EXHIBITION in this city last week was a more splendid affair, by far, than most of our citizens had anticipated; and gave such evidence of IMPROVEMENT as must be gratifying to all. The display of fruits, especially of peaches, was remarkably fine, notwithstanding the season has been somewhat unfavorable for *quality*. Of grapes too there was a fine show, though many were not quite ripe. Apples also, were abundant and handsome; and pears, plums, &c., as good as could be expected for the season. But the admiration of *all* was the brilliant display of ROSES, and the tasteful manner in which the floral portion of the exhibition was arranged by the LADIES, without whose aid the society would utterly fail. We regret that owing to the temporary absence of the Secretary we are not able to give an official report of the exhibition in this number of our paper. It will be published in the city papers as soon as he returns and it can be prepared.

SPLENDID PEACHES.—We challenge the whole world to produce larger and handsomer peaches than were exhibited at our Fair, of SEEDLINGS too, raised in the vicinity of COLUMBUS! Specimens of the Vandemark Seedling (from seed of the Lemon Cling,) a remarkably handsome fruit, deep yellow flesh, fine red outside, measured *over a foot* in circumference! One weighed 14 ounces, and four together weighed 2 pounds and 14 ounces. Several very fine seedlings were also exhibited by Mr. Sites, also by Mr. Burr, and by Mr. Lazell.

CHOICE ROSES.—Not much less than one hundred varieties of the choice new kinds of roses, were exhibited by Messrs. Buttles, Burr, Doherty and others—particulars in our next.

TALL CORN.—We exhibited at the horticultural Fair last week corn stalks 14 feet high, grown on our "little farm"—upland clay soil, formerly a *brickyard*, moderately manured and SUBSOIL PLOWED.

Our neighbor of the Statesman has a corn stalk a foot and a half longer than ours—but grown, we believe, on rich bottom land.

THE WEATHER has been quite cool of late, with one or two frosts, but not sufficiently severe to kill late corn, except in cold places. The corn crop is ripening finely. The potatoe rot is destroying most of the potatoes in this region, except those planted early.

"LIME AND LIME KILNS" will be attended to in our next—also "Sheep and Dogs," "Fattening Pork," "Dairy Management," &c.

TO COUNTY AGRICULTURAL SOCIETIES.—We notice that several societies have already appointed delegates to attend the annual meeting of the State Board of Agriculture in December. We advise all to do so at the time of their approaching fairs, or other meetings. If your Representatives in the Legislature are first rate men for the purpose, appoint them; if not, send a good man on purpose, especially if the distance is not very great. Remember there will be one half of the members of the State Board to elect at the annual meeting.

"THE OHIO HARMONIST" is on our table, and shall be noticed in our next, provided we can find time to sing a portion of its contents. Several new exchanges, and other publications are also awaiting for examination and notice. We are in hopes to procure some assistance in this department of our labors before long.

PEPPER MINT OIL.—A writer in the Syracuse N. Y. Journal, states that more peppermint is used for oil in Wayne county, N. York, than in all other parts of the Union; also, that a company of manufacturers of the oil from New York have recently purchased all the manufacturing establishments and the growing mint crops of that region, and bound the former operators not to engage in the business for a certain number of years; for all which they pay the sum of $200,00).

Pretty large story that. What say our Lorain and Erie county mint growers? We have understood from Mr. Swift, that the business was not found very profitable, owing to fluctuation in the price, and other causes.

Steubenville Horticultural Society.

This society appears to be progressing with a good degree of spirit. At a meeting held last month it was resolved to hold the annual exhibition and fair on the 23d and 24th insts., (Sept.,) on which occasion there is to be a grand horticultural dinner, also an address, &c. Premiums will be awarded on choice fruits, flowers and vegetables exhibited at the fair. The society also offer the following premiums to be awarded within five years for seedling fruits raised in Jefferson county:

Apples—for the best, which shall excel any now in cultivation, of the improved kinds,						
			for keeping			$30 00
Do.	do.	do.	do	early,		20 00
Pears,	do.	do.	do.	keeping,		30 00
Do.	do.	do.	do.	early,		20 00
Peaches—for the best cling which shall excel any now cultivated,						10 00
Do.	do.	do.	free	do.	do.	10 00

The following gentlemen have been elected officers of the society for the ensuing year:

President—John D. Slack.

Vice Presidents—T. J. Ware, Jas. Powell, John Johnston.

Corresponding Secretary—Abner L. Frazer.

Recording Secretary—J. G. Morris.

Treasurer—Robert Speer.

Executive Committee—John Eberlein, John Linduff, J. L. Holton, James Alexander, and John Barr.

That Wheat and Chess! Head.

Wonderful Case of Transmutation!—The remarkable head of wheat brought to our notice by the Goshen and Salem Farmers' Club in Clermont county, and said to have "seven perfect grains of chess growing out of it," has been sent to us through the kindness of Mr. Armstrong, on whose land it was found. It reached us in perfect condition, sealed up very securely in a small box. We broke the seals and took out the head in the presence of Mr. Joseph Sullivant of this city, who is well known as a botanist, &c., and requested him to examine it. The wheat head was of perfect form and well ripened, and at its base there was a spikelet containing "seven grains of perfect chess," sure enough, which at first sight appeared to have grown out of the wheat head. But on close inspection, and on carefully removing the grains of wheat behind which it was fastened, it could at once be seen that *the chess spikelet had* no connection *whatever with the wheat head*, but was merely caught by its thread-like stem between the chaff and stem of the wheat head, and had there broken off, probably in harvesting. We have replaced the chess, firmly as before in another place on the head; and it can be seen at our office by any who desire to inspect it; or we will return it to Mr. Armstrong if he has any further use for it. The donation of books which we promised the club, we conclude will not be claimed just yet.

A head of grain similar to the foregoing, but more of an imposition, was once presented to us at Rochester, when we had offered a large reward for proof of the absurd notion that wheat will turn to chess.

Hamilton Co. Fair.—We learn from those who were present, that this Fair has been better attended, and a better feeling and more spirit manifested, than for years past. We hope this is only an earnest of better days and times for our farmers. When every farmer shall feel it to be a solemn *duty*, as well as his interest, to make his son a *scientific, educated* farmer, then he may pursue his business *intelligently*, and hence *profitably*, and take his stand among educated men of *any* profession.—*Cincinnati Gazette.*

Franklin Agricultural and Horticultural Society—Clermont County.

Saturday Evening, Aug. 28, 1847.

Society met pursuant to adjournment.

On motion, James Ferguson and John Hancock were elected to deliver addresses the first day of the Fair, to be held at Franklin school-house, on the 1st day of October next.

The Society then went into a discussion upon the propriety of establishing Agricultural schools. The question was ably handled; it was taken up by men deeply versed in Agricultural lore The deformities of the present system of education were pointed out, and remedies proposed. The discussion was one of those rarely met with, in which tact, talent, and experience combine to create an interest that does not fail to arouse every dormant energy.

On motion, Charles Robb was elected to deliver the occasional address at the next meeting, which will be on the 25th of September.

CHARLES ROBB, *Sec'y pro tem.*

A Profitable Cow.

Mr. Bateham:—The following statements I think will show conclusively that the cow is a valuable animal:

"*Old Red*," for the last twelve years has yielded us on an average not less than twelve quarts of milk per day, for ten months in each year; which amounts in the aggregate to no less than 9120 gallons, or 300 barrels, for the twelve years; and if sold at the low price of two cents per quart, it would make the sum of $864,00, or sufficient to buy forty-three cows of like good quality at $20 each. And now if "Old Red" has not sufficiently compensated her owners, we can fatten her this fall and make her yield $25,00 more in beef, hide and tallow.

Wheat and Chess.—Till this year I always regarded the idea of wheat's turning to chess as all moonshine.—But this season, finding quantities of chess growing where clean, *clean* wheat was sown, and on examination finding wheat and chess actually growing on the same root(?) now of course I am a believer in transmuation.

A Tenant Farmer.

Rootstown, Portage Co., O., 1847.

Remarks.—Why do not some persons send us specimens of these compound chess and wheat roots? We never yet could procure a *real* specimen of the kind for love nor money, and shall not believe such were ever discovered till we see them.—Ed.

LADIES' DEPARTMENT.

Receipts in Domestic Economy.

Mr. Editor: Rather than you should again be obliged to revert to so sour a subject, to fill the "Ladies' Department" of your deservedly popular paper, I will send you a few receipts, which you can insert, or not, at pleasure.

Mock Oysters, of Corn.—Take a dozen and a half ears of young corn, and grate all the grains off the cob as fine as possible. Mix with the grated corn three large table spoonfuls of sifted flour, the yolk of six eggs well beaten. Let all be well incorporated by hard beating. Have ready in frying pan an equal proportion of lard and fresh butter. Hold it over the fire till it is boiling hot, and then put in portions of the mixture as nearly as possible in shape and size like fried oysters. Fry them brown, and send to table hot. They should be near an inch thick. In taste it has a singular resemblance to fried oysters. The corn *must* be young.

Tomato Honey.—To each pound of tomatoes allow the grated peel of a lemon and six fresh peach leaves. Boil them slowly till they are all to pieces, then squeeze and strain them through a bag. To each pint of liquid allow a pound of sugar and the juice of one lemon. Boil them together half an hour or till they become a thick jelly. Then put it into glasses, and lay double tissue paper over the top. It will scarcely be distinguishable from real honey.

Rice Cakes.—Pick and wash half a pint of rice, and boil it very soft. Then drain it and let it get cold. Sift a pint and a half of flour over the rice, and mix in a quarter of a pound of butter and a salt spoonful of salt. Beat five eggs very light, and stir them gradually into a quart of milk. Beat the whole hard, and bake in muffin rings, or waffle irons. Send to table hot, and eat with butter, honey or molasses.

Quince Cheese.—Have fine ripe quinces, and pare and core them. Cut them into pieces and weigh them, and to each pound of the cut quinces allow half a pound of the best brown sugar. Put the cores and parings into a kettle with water enough to cover them, keep them covered closely. When you find they are all boiled to pieces and quite soft, strain the water over the sugar, and when it is entirely dissolved, put it over the fire and boil it to a thick syrup, skimming it well. When no more scum rises, put in the quinces, cover them closely, and boil them all day over a slow fire, stirring and mashing them down with a spoon till they are a thick smooth paste Then take it out, and put it into buttered tin pans or deep dishes. Let it set to get cold. It will then turn out so firm that you may cut it into slices like cheese. Keep it in a dry place in broad stone pots. It is intended for the tea table.

Cannot some of the "sisterhood" tell us how to make "nice good" pumpkin butter?

Respectfully, &c.,

Melrose, Brown Co., O., Sept., 1847. Mary.

Soda Coffee.—The flavor of coffee may be improved by adding forty to fifty grains of carbonate of soda to each pound of roasted coffee. In addition to improving the flavor, the soda makes the coffee more healthy, as it neutralizes the acid contained in the infusion.—*Exchange paper.*

Substitute for Lamp Oil.

Mr. Bateham:—The following receipt for preparing a composition for burning in lamps, is being sold extensively in Ohio, Pennsylvania, and other States. If valuable it ought to be generally known, and if not, the sooner the imposition is exposed, the better. H.

"*A Composition to burn in Lamps, superior to oil or gas.*—To one gallon of alcohol add one quart spirits of turpentine, shake or stir in a can or bottle till completely mixed and of a milk-and-water color, then add 2 ounces pulverized gum camphor, or a sufficient quantity to restore the composition to the natural color of the alcohol—it is then fit for use. Fill your lamp about two-thirds full, and put the tube in a cork well fitted, with a cotton wick long enough to receive the composition. It will burn clear, without smoke or unpleasant smell, and without consuming the wick."

Remarks.—The foregoing composition is of the kind called *spirit gas*, which was extensively used a few years ago in most of the cities and towns of the eastern States, but has been gradually going out of use of late owing in a great degree to the numerous accidents that have occurred from explosions and the extreme combustible nature of the composition, rendering its use highly dangerous to the lives of those who use it. We advise our readers to avoid alcohol in all its shapes.—Ed.

Immigration at the Port of New York.

A New York paper gives the following as the amount of immigrants to that port alone up to the 31st of July last. What the number is that has arrived at other ports during the same time, and those that cross from Canada, we have not seen stated, but the amount must be very great:

Number of *steerage* passengers who arrived at this port in vessels from the various countries of the old world, in the twelve months from 1st Aug., 1846, to 31st July 1847, as compared with those in the twelve months from the 1st of Aug., 1845, to 31st July, 1846.

	Twelve months ending 31st July.	
	1846.	1847.
British ports	54,226	88,733
French ports	15,632	26,770
Hausetowns, (Bremen and Hamburgh,)	12,887	15,525
Belgium	4,303	13,128
Holland	2,430	5,076
Sweden and Norway	1,133	2,021
Prussia	118	274
Spain	13	1
Italy, Sicily and Sardinia	204	114
All other ports	334	465
	91,280	152,116

The above embraces merely *steerage* passengers. The "better class," the cabin passengers—the cigar and champaigne gentry—are not estimated.

Growth of Indian Corn.—The hot weather of the last fortnight has almost doubled the growth of corn. A man in Amherst noted the growth of a single stalk during three hot days last week, as follows: first day, 6 inches; second 5½; third, 5; total, 16½ inches in three days.—*Springfield, Mass., Republican.*

Last season, we measured corn for many days in July, in the town of Wheatland. Five inches in 24 hours was the largest growth noted. All vegetable physiologists concur in saying that plants give out carbonic acid at night, and absorb oxygen; and leave it to be inferred that they do not grow except during the light of day. We found, however, that corn and a grape-vine increased in length quite as fast from 8 P. M. to 4 A. M., as during any portion of the sixteen hours from 4 A. M. to 8 P. M.

Few are are aware how much water a hill of growing corn will throw off from its long and broad leaves during a hot day in July. During this rapid evaporation, not a particle of the mineral matter taken up into the circulation with the water that enters the roots escapes with the vapor into the atmosphere. When these minerals exist in the soil in due proportion to meet the precise wants of the organizing tissues, such organization, in favorable weather, goes ahead at a cracking rate. To feed living corn-plants judiciously, is a point in agriculture not sufficiently understood.—*Rochester Am.*

Notes of a Trip North.

(*Concluded from last No., page* 126.)

Commencement of Oberlin Collegiate Institute.—This is the second time we have been present at the the annual commencement exercises of this institution. On both occasions we found a very large attendance of persons from all parts of northern Ohio, and some from a greater distance. The spacious church, which is calculated to hold a larger congregation than any other in the state, was crowded to its utmost capacity—containing, it is believed, not less than 3,000 persons—while hundreds were unable to gain admission. The interest manifested on these occasions, and the fact that the institution is every year filled to overflowing with students, afford good evidence that the Oberlin Collegiate Institute has taken a deep hold of the sympathies of the people, and is exerting a powerful influence on the public mind, notwithstanding the unfavorable prejudice which some persons cherish against it.

Of the public speaking and other exercises at commencement, we have not room to speak in detail. Suffice it to say, they were of such a character as we think could not fail to give all who heard them very favorable impressions in regard to the instruction and mental discipline afforded by the institution. Of the particular school of theology connected with the institution we have nothing to say; but there are some features in the organization and regulations of the college, that as an advocate of education, we feel bound to notice and commend.

It is emphatically the People's College.—Its whole arrangements and economy are such, that any and every young man who possesses industrious habits and a thirst for knowledge, can have that thirst gratified by obtaining a liberal education, where he is not made to feel that *poverty* and *labor* are a disgrace.

It elevates labor. By the rules of the institution, and daily examples of the President, and all the Professors

and Teachers, together with those of the five hundred hundred students, each one is made to feel that LABOR IS HONORABLE, and *idleness* is a *disgrace*, to the rich as well as the poor.

IT ELEVATES THE FEMALE CHARACTER.—We believe it is the only institution in the land, where females are allowed the same privileges, and receive the same honors as the other sex. If any of our readers have doubts respecting the capacities of the female mind, or the use that young ladies will make of these advantages, we can only wish that they had attended with us the commencement exercises of the past two years. The addresses and compositions of the graduating classes of young ladies in both of their departments, were of such an order as we think would have convinced the most skeptical on these points.

There are, however, some things in regard to which we think great improvement might be made, by the faculty at Oberlin; and we hope the suggestions will not be deemed impertinent. In our opinion, what are commonly termed the *natural and practical sciences* should have a larger share of attention in their course of education. Besides natural philosophy, chemistry, botany, and physiology, for which provision is now made. The important science of *geology* ought certainly to be included, and also the principles of *mechanical science* and *technology*, or knowlege of the arts.

Another defect in the system of education here as well as in all our colleges, is a neglect of systematic *physical education*. The mind is stimulated and excited to its utmost capacity, but too little care is bestowed on the healthful growth and perfect developement of the body. Look at the mass of graduates of our colleges, and how few of them, especially the mentally gifted ones, enter upon the high duties of life with sound and vigorous bodily health. And of what avail is an educated mind compelled to live in a ruined and diseased body?

The manual labor system at Oberlin, it is true, remedies this evil in part; but from the appearance of the majority of the students, we are convinced it is *only* in part; and the greatest improvement the faculty could adopt would be to build a *gymnasium*, and require the students to practice a regular system of gymnastics, in connection with their daily study and labor. In fact no college or academy should ever be without this appendage.

Another very necessary improvement at Oberlin, and one which could be made without expense, is, the *planting of more trees* about the college buildings, grounds and walks. There is no reason why Oberlin should not be as celebrated for its beautiful trees and shaded walks, as is the "city of elms," where old Yale is located; and how much it would contribute to the cheerfulness and health of the students, as well as the pleasurable associations connected with the recollections of the place throughout after life.

Whin, Gorse, Furze.

In the 8th No. of Colman's European Agriculture, is a somewhat of a lengthy article on this small, prickly, evergreen shrub. A new variety called French furze has been introduced into England, and is found to be a most valuable feed for cattle and horses in winter, and has the extraordinary quality of being very productive, even on poor, dry land. An evergreen plant adopted to our climate, like this furze, affording abundance of green feed in winter, it seems to me would be of inestimable advantage. Please turn to the article of Mr. Colman, and if you shall deem this plant worthy of trial here, you may consider me as engaged to take a small quantity of the seed, should you see proper to import some. I understand Mr. Colman; as saying there is a coarse furze native to England, and perhaps Ireland, to which the cultivated kind is much superior. Who can give us any additional light on this matter? E. NICHOLS.

REMARKS.—From a pretty familiar acquaintance with the plant, called *furze* in England, we have no faith that it would be found of any value in this country. In the first place, it is so coarse and thorny, that no animal can eat it until it is *crushed by grinding*, and this requires too much labor for a country like this. MR. COLMAN himself admits that "the labor required to prepare it would prove a serious objection in a country where labor is difficult to be procured." In the next place, from what we have seen of experiments to grow this plant, as a curiosity in gardens in this country, we do not believe it would be found to withstand our climate. The winters seem too changeable and severe, and the summers too hot. ED.

The Maclura, once More.

Your explanation that the Maclura is a small tree, gives me some better hope as to its success as a hedge plant. It may also be remarked that transfering southern plants north, dwarfs them; but if I recollect, it is stated that altitude or northern latitude, not only dwarfs the trees, but renders them spare or scattering. Does not Humbolt make this statement in speaking of the South American mountains? Perhaps some of our soldiers who have ascended the Cordilleras can tell. In the mean time, what is this chapparel? Is it not a prickly, evergreen shrub, adopted to hedging, and does not the height at which it grows on the mountains, indicate the possibility of its thriving here? I have little faith, however, in foreign plants—but perhaps when Mexico is joined to the United States, it will be a native—some good may come from the war. E. NICHOLS.

REMARKS.—We saw a specimen of chapparal tree, or shrub, at the garden of Mr. Hoffner, near Cincinnati last spring. It is a much less formidable looking bush than we had supposed; and we doubt whether it would prove sufficiently strong and thorny to make a good hedge plant, even if found adapted to our climate; and we do not think it would withstand our trying winters, though of this we have seen no trial.—ED.

Letter from N. Sawyier.

SHEEP FARMING ON THE PLAIN LANDS—GUADELOUPE MERINOS, &c.

MR. M. B. BATEHAM:—I was sorry that you did not come out to Wahoo to see me during the shearing, and see my flock. I was present during the whole washing and clipping operations of my flock, and attended to what I consider absolutely necessary for every Flock Master to do—the personal inspection at the time of shearing, of every sheep;—to learn its age, health, build, quality of fleece, and if a ewe, its qualities as a breeder and nurse. All these things are necessary to be known, in order to refine and advance a flock to that degree of perfection of which this animal is susceptible, and which will yield to the owner the greatest profit. This is the way the animal has been improved and advanced in Europe.

But to return to the subject of my flock, kept upon a champaign country, prairie and barrens, which has heretofore been considered as unsuitable for sheep farming.—When I commenced the growing of wool, I labored under the same impression, as to the soil; and that it would not answer to keep many sheep together in one flock.—But on reflection, and bringing common sense into play upon the subject, I was led to think that I might be mistaken; and at any rate I would test it by experiment. I accordingly went on, and my experiment has proven fully to my satisfaction, that my former impressions upon both subjects were wrong. I am fully satisfied that those champaign lands of Madison, Clark, and Champaign and Greene counties, are lands of the first order for the production of wool; and of *Merino Sheep*, with proper attention, any number may be kept together with safety. I have had together in a flock as many as 400, which were healthy and did well. Upon a critical inspection of my flocks, as they were clipped the last spring, I can say, that I have never, in any part of the United States, seen a more healthy flock.

My wool, in general, is of a long, fine, silky staple; and the *strength* of the fiber, and the soft delicacy of the touch, show the sound constitution and health of the animal.

I am increasing my flock by the introduction of the *Guadaloupe Merino* from New England. Have an additional flock now on the road, traveling all the way out by land. Very Respectfully,

NATH. SAWYIER.

Cincinnati, Sept. 1847.

To Protect Melon Patches.

MR. EDITOR:—As you have given one plan for protecting choice fruit, I send you Old Sam's plan for protecting melon patches. Old Sam lived near one of the Vermont Colleges, and was up to a thing or two. He enclosed his melon patch with a tight board fence, the end of each board resting upon the ground; placed a hollow log in the centre of the patch, and domiciled a prolific family of *Skunks* in the log, when the melons were nearly ripe. Dont you think there was a little fun about those times? The melons were safe, and the tailors got a few extra jobs. MELON.

[We suspect the remedy would be found worse than the disease.—ED.]

Potato Bugs and Rose Bugs.

MR. BATEHAM:—I send you enclosed a couple of bugs; are they the *potato bug* I see mentioned in your paper. [Yes.] If so, I have a remedy for them, and also for the *rose bug:*

Take fresh dry burnt wood ashes, and sprinkle over the potato tops, or rose bushes, (or other shrubs and vines,) as soon as the bugs appear pretty numerous, and they will soon leave. We have tried this effectually, and it may be relied on. Before we discovered the remedy, (which was made known to us by our hired man) we gathered from one to two handfulls of rose bugs from a bush– according to size.

TO PREVENT BEES FROM GOING OFF AFTER BEING HIVED, stop the entrance, (and all holes except a small crevice for ventilation,) and have the hive so arranged that you can feed the bees for two or three days, when they will have commenced work.

A YOUNG FARMER.

Crawford Co., O.

Remedy for the Grub Worm.

A subscriber in Greenfield, Highland county, informs us that he last spring discovered a large number of grub worms in sward land when plowing for corn, and set himself to work to discover some means of preventing their anticipated ravages upon the young crop; and after consulting with his neighbors, &c., he hit upon the following plan, which he thinks was completely successful:

He took one pound of roll brimstone for a bushel of corn, pounded it fine and sifted it through a fine seive, (why not use flour sulphur?) mixed it with corn and put on warm water—this made the fine brimstone adhere to the grains of corn and caused the smell to penetrate them, so that the odor seemed to remain about the root of the young plants and protect them from the worms. No injury was done to the crop where the seed was thus prepared, while in other fields near by the crop was nearly destroyed.

REMARKS.—It is well known that sulphur is obnoxious to most kinds of insects, but we greatly doubt whether the above remedy will be found of much utility, as sulphur will not dissolve in water, and it is scarcely possible that the quantity which will adhere to the grains is sufficient to effect the flavor of the stem of the young plant. It certainly will not protect them from the ravages of the *cut worm* which works on or near the surface of the ground; but if the *grub worm* eats only the remains of the seed or the root, it is possible that the remedy may be of service. We advise our friend to try it again next season if grubs are visible, and plant alternate rows without any preparation, then mark the result.—ED.

How to Decide the Chess Question.

MR. BATEHAM:—I have seen in the Cultivator of late several communications on the transmutation of wheat to chess, on which subject there appears quite a difference of opinion among farmers. Now it appears to me that any person desirous of ascertaining the fact, might easily do so, or at least, satisfy themselves upon the subject. Let them take, say 100 grains of pure wheat, or more if they choose, then take a sufficient quantity of *clean earth*, and put in a small open box, with the sides say 6 inches high, and plant the wheat therein; keep it in some secure place where birds, nor any thing else can possibly drop any chess into it, and in the winter, change it into some place where it can have a chance of a part freezing out, (also cut off the tops if they please,) and see if they can raise any chess in that way. Try it twice, thrice, or as often as they choose, until they become satisfied. If ever they succeed from raising any kind of grain from the seed of another, they will do more than I can. MERCER.

St. Marys, O.

REMARKS.—Experiments of the kind were repeatedly and carefully tried by correspondents of the Genesee Farmer ten or twelve years ago, but all of them failed to produce chess from wheat. Let the believers in transmutation test the matter for themselves, in every way that they conceive likely to produce the result, and if their theory is true, the proof can certainly be adduced.

But here comes an old friend on the opposite side, let's hear him.—ED.

How to Produce Chess from Wheat.

Take a pint of *pure* wheat, and select a spot of clean ground, (of a clayey or loamy nature,) prepare it for wheat at the proper season, and let the ground be very dry; then sow or drill half of the wheat on one half of the ground, then take a watering pot and water the whole ground till it is completely flooded, all in mud, as a very heavy rain would make it. Let it remain till just dry enough to work, then sow the other half along side of the first, and observe the difference in the crop at harvest. Remember the ground must be *very dry* when the first half is sown. Spouty cold land is the best for the experiment. I desire to warn farmers not to sow wheat when land is very dry. I learned this by experience more than twenty-five years ago, and I can find abundant evidence of the evils resulting from the practice all around me. The wheat this year is generally full of chess, but that is much the worst that was sown when the ground was very dry, and where a heavy rain formed a crust on the surface through which the young wheat came up with difficulty. This I believe was the main cause of so much wheat turning to chess. R. W.

Muskingum Co.

REMARKS.—If this was the "main cause," why did the wheat "turn to chess" quite as much on sandy and light soils where no "crust" is ever produced; as we know was the case throughout the State? The great and true cause of the appearance of so much chess, was, the killing out of the wheat by the severe and open winter.—ED.

☞Remarks on breeding horses before long.

Wheat and Chess—Transmutation.

Mr. Batehan:—One of my neighbors says that he once knew a man who cleared a field, "right in the woods," and sowed it with wheat that was *very clean*. In the spring he pastured it off, and "it *all turned to cheat*."—Another neighbor says he once mowed off a small patch of wheat in one of his fields in the spring for horse feed, and *that* patch produced a heavy crop of cheat and nothing else, while in the balance of the field there was no cheat. But I am not done yet. Mr. G. tells me that he had this season a *heavy* crop of timothy upon a field that was sown to wheat last fall. The field had never been sown in timothy, and not being near his meadow, he knows of no *possible* way that timothy could have got there. And Mr. W. says, that a few years ago, there was a small patch of elders in his meadow, which he grubbed out and sowed clean timothy seed in its place. The first crop was nothing but timothy, but this season it brought forth a heavy crop of chess. And I have myself seen this season, in several places, heavy patches of chess in meadows where it is said that chess was never seen before. Then be consistent, you believers in transmutation, and say, not only that wheat turns to chess, but that timothy turns to chess, and that wheat turns to timothy; for the two last are as easily proven as the first. And why not believe too, that *clover* turns to *foxtail?*—I sowed a field last spring with *clean clover seed*, and now instead of clover there is *tons* of foxtail. How came this? There has no foxtail grown upon the field for several years before. If wheat turns to chess, why not clover turn to foxtail?

But I have not done yet. I am now going to relate the most *wonderful change* that has ever taken place, and I stand ready to prove to the satisfaction of every *reasonable* man, *the fact*, that a great deal of my corn this season did actually *turn* into *cutworms!* R. L.

West Carlisle, Ohio, Aug. 1847.

Experiments with Different Varieties of Wheat.

By Gen. R. Harmon, Wheatland, N. Y.

From the Am. Agriculturist, for Sept.

Some of the numerous readers of the Agriculturist perhaps, may be entertained in reading a statement of the result of some of the different varieties of wheat that I have under cultivation, testing their different qualities as to hardiness and productive qualities. The ground selected for growing them is a gravelly loam, with a little sand intermixed. The plot was selected from a level field prepared for wheat, on the south side of a stone fence, three feet high, with two boards on the top; in all five feet high.

On the 18th of September, I sowed the different varieties in drills, twenty inches apart, running from the fence four rods. The wheat was covered from one to two inches deep, the ground being in good condition to bring it up.

The varieties employed may be briefly described as follows:—

No. 1.—*Wilkshire Bald*, from England two years; not hardy, only a few scattering stools in each drill, with large heads that made their appearance eight days after the common varieties.

No. 2.—*Sandoming Bald*, from Germany three years; about half of the drills near the fence stood well, the other half being about half winter-killed, their heads appearing with common varieties.

No. 3.—*Chatham Bald*, from England two years; one-third of the drills next to the fence stood well, the other two-thirds being somewhat injured by the winter. Heads large and well filled. They made their appearance with the common varieties, but are not hardy.

No. 4.—*Newsvoy Bald*, from England. This variety appears nearly the same as Chatham, but not so much injured by the winter. Bids fair to give a good return.

No. 5.—*Alabama Bald*, two years from Cincinnati, O.; one-third of the drills near the fence being somewhat injured by the winter. The remainder of the drills have but a few scattering stools. This variety much resembles the Virginia May Bald, heading at the same time, and in many respects the same.

No. 6.—*Virginia May Bald*, from Virginia ten years. This variety has not become acclimated, nearly one-half having been destsoyed by the winter. It heads one week before the common varieties.

No. 7.—*White Provence Bald*, from France eight years. This was somewhat injured by the winter, and heads three days before the common varieties. It has proved valuable for late sowing for several years past, but it has not done so well this season.

No. 8.—*Crate Wheat, Bearded;* cultivated in this section for many years. The drills were the same at one end as the other; stands the climate well. The long stiff beards are objectionable.

No. 9.—*Wheatland Red-Bald*, from Virginia May; heads with it; nearly one-half winter-killed.

No. 10.—*English Red-Chaff, Bald.* One half of the drill near the wall stood well, the other half, having but a few scattering stools, was winter-killed. It heads the same as the common varieties.

No. 11.—From Oregon last year; a beautiful white berry, very plump, and not one kernel of it vegetated.

No. 12.—*Tuscan Bearded*, from Tuscany ten years.—This variety has a few scattering stools in the drills, the winter being too severe for it. One week later than the common varieties; heads large; berry large and white.

No. 13.—*Etrurian*, from the Patent Office; a very few stools were left, the winter being too hard for it.

No. 14.—*Talavera Bald;* from England eight years; more than half winter-killed; heads large, and appeared six days after the common varieties.

No. 15.—*Mummy Wheat, Bald*, from England two years; mostly winter-killed; a few stools that put out large heads, were very late.

No. 16.—*Mediterranean, Bearded*, sown four years; somewhat injured by the winter; straw short with small sharp heads.

No. 17.—*Improved White Flint.* This valuable variety has stood against all the ills affecting the many other varieties. The drills were full from one end to the other, producing a good return. I am confident it is the most valuable of any of the varieties that I have tested.

No. 18.—*Tauland Bald*, three years from England; a few stools with large heads; nine-tenths winter-killed.

No. 19.—*Botany Bay, Bearded*, sown two years. This appears much like the Kentucky White Beard, being hardy; stands very well in the drills. The stiff beards are objectionable.

No 20.—*Hutchinson or Kentucky White Beard;* the description of No. 19 will answer for this.

No. 21.—*Anguierre Spanish, Bearded*, and imported by Mr. Townsend, of Albany, three years ago. It was somewhat injured by the winter. Straw and heads short, berry large and white. It does not appear to be suitable for this latitude.

No. 22.—One drill of thirty varieties mixed with the Improved White Flint. They were grown together for three years. They now stand well and are more than half of I. W. Flint.

No. 23—One drill of twenty-five new varieties mixed with the I. W. Flint. This drill stood somewhat scattering. I wish to see which variety will predominate, and whether they will produce a new variety.

No. 24.—*Orange*, from Virginia.

No. 25.—*Blue Stem*, from Virginia.

No. 26.—*White Bald*, from Virginia.

No. 27.—*Virginia Red-Chaff.* These four varieties are two years from Virginia; and were somewhat injured by the winter.

No. 28.—*Zimmerman's Bald Wheat*, from Maryland two years. Straw and head short, and not valuable here.

No. 29.—*Scotch Club, Bald*, from Ohio, much resembling No. 28; both varieties heading five days before the common varieties. On a strong soil they might do well.

R. Harmon, Jr.

Wheatland, N. Y., July 1847.

From the Albany Cultivator.

Chemistry Applied to Agriculture, or, what Manure does this Field Need!

This inquiry is beyond question one of the most frequent and important that presents itself to the farmer.

With the light which has, within the last few years, been thrown upon the subject of manures, their nature, and the secret of their value, something like a practical course has been revealed. It may be illustrated as follows:

If a soil fails to produce a given crop, it is because it either wants the *requisite texture*, or it wants certain essential inorganic ingredients, or it may be deficient in both.

If vegetable refuse in sufficient quantity has been strown over and plowed in, the deficiency of one or more *essential inorganic ingredients*, must be considered the solution of the failures.

Now how shall this deficiency be ascertained? How shall it be determined what a soil needs?

It may need gypsum, or phosphates, or potash, or soluble silica, or lime. It may be benefitted by ashes, or poudrette, or guano, or fish. But it probable does *not* need *all*, and would not, probably, be equally benefitted by them severally.

Which, then, shall be selected? How shall any one, without aid, be enabled to determine what will benefit his soil *most?*

The following suggestions are made in general reply to this inquiry:

Having prepared a few square yards or rods, so that the texture shall be all that is desired, let equal areas—six feet square each, for example—be accurately measured and staked. If the soil in the same field be variable, each kind may be treated for a separate experiment.

Then let equal quantities by weight, of a thoroughly pure grain, wheat, or rye, or oats, or any other it may be desired to try, be sown and covered, in these several areas. Only one kind of grain will be employed in the experiment. If others are to be tried, let separate areas be selected and prepared—a suit for each grain.

Then take small quantities of gypsum, potash, soda, ashes, bone-dust treated with diluted sulphuric acid, night soil, or any of the so called manures it may be wished to try, and put them upon or near the surface of the soil. If deeply buried, they might be dissolved by rains, and carried down beyond the reach of roots.

Now all will receive from the frost, the rains, the dew, the sunshine, and the drouth, the same treatment.—From the native soil they will derive equal measures of nutriment.

But from the added manures they will derive unequal advantage. Some of the additions will contain a desired ingredient—others will not; and the relative values will be indicated in the relative weights of the ripened grain at harvest.

The seed was weighed. The harvest must be weighed. The better manure will be pointed out in the higher weight and plumper appearance of the grain.

That the manures may be compared, and the relative profits of this or that readily estimated, positive quantities should be employed, that is, such, that by measure or weight, the cost of that used may be accurately known.

The weighing for the occasion, if not otherwise convenient, might be made with the sugar and tea scales of the nearest grocer. As the grain to be sown is, for each lesser piece of ground to be the same in weight, the quantity for one being determined, it may be placed in one scale pan, and the other parcels severally balanced against it.

There is some trouble in all this care about *quantities;* but if the conviction be deepened that a faithful attention to them is indispensable in experimentation that is to be of value, it may perhaps be more cheerfully engaged in.

It sometimes, indeed frequently, happens that farmers purchase large quantities of a given manure, because they have learned that it had been found serviceable in particular cases. They hope to reap a profit commensurate, within certain limits, with the amount of manure employed; regardless of the greater or less correspondence there may exist between the soils upon which it had been found profitable and their own. They employ it. They are disappointed. The manure does *not* contain what *their* soils need, though it may have been admirably suited to the improvement of others.

What the producer wishes in making purchases of raw material, is, to obtain as much of that which can be used, and as little of that to be thrown away, in a given quantity, as may be.

So with the grain grower. He wishes to pay for *just that* which will grow wheat, or corn, or oats. Other materials, of no service to the immediate crop, only to be washed away by rains before a seed demanding them shall be sown, he cares less to pay for.

E. N. Horsford.

Cambridge Laboratory, May, 1847.

From the Am. Agriculturist.

Artillery versus Agriculture.

In a short excursion made for the first time to West Point a few days since, I was highly gratified with the taste, liberality, and good judgment displayed in all the arrangements provided for the education and comfort of the future soldiers of the country. The site is one of the most beautiful, commanding, and healthful in the Union. A plain of table-land jutting into the Hudson, affords an uninterrupted view of some 15 miles on the most magnificent river in the world, covered with its floating steam and sail craft. Bold elevations hem it in upon the west, on the nearest of which, is old Fort Putnam, and still higher and more remote the remains of two other ancient redoubts, that flanked the first, while the Revolution demanded its occupation and defence. On all sides the mountains go towering up heavenward till the eye is tired of gazing on their misty tops, while around on every side, the fertile valleys and modest matronly villages seem to rejoice in the protection of the lordly hills.

The Point itself, embracing some 100 acres out of nearly 3,000 which the government owns, is tastefully laid out in groves and open fields, with walks and avenues threading them at proper intervals in all directions.—Seven or eight large, solid structures built at great expense, and filled with every thing necessary to give aid to the youthful mind, or comfort to his personal wants while in the pursuit of knowledge; and around them are commodious and pleasant abodes for those who minister to their acquirements or necessities. Some thirty professors and their aids stand ready to pour military instruction into the minds just opening upon manhood; and $400 per annum is allowed by government for each of the 250 students there for the purpose of providing liberally for every want. A large band of choice musicians is in attendance to lend enchantment to the scene, and awaken a proper enthusiasm on all occasions. Scientific apparatus, libraries, cannon, powder, balls, swords, epaulets and feathers are all carefully provided for the future heroes. Not a shoe tie is wanting, not a button or thread out of place. All is as punctiliously arranged as a bridal party or a court presentment. And all this is well. It is befitting this age and nation; and if we must have military establishments, and if still we talk of war and especially if we make it, it is entirely proper and consistent that we thoroughly educate a class of officers, capable of leading and rendering more efficient, the coarser materials of an army that is destined to deal destruction on what we term our foes.

The propriety of a similar provision for our naval establishments is equally obvious and equally regarded, by our rulers. They have secured for the nation's use, whether for offensive or defensive war, a formidable list of seventy-fours, frigates, steamers, &c,, magnificently ap-

pointed with every improvement of death and devastation, from the terrific Peace-Maker and dreaded Paixhan, which will send their destructive shots several miles distance, down to the light revolving pistol, almost as destructive when near at hand. While we are at peace, about $8,000,000 annually suffice to sustain these arms of our national honor and defence; but is computed by some wise heads, that $50,000,000 per annum will hardly come up to the sum necessary to sustain them while teaching the audacious Mexicans that they cannot dispute our will with impunity. Thus much for *artillery*.

But how fares it in the mean time with agriculture?—Agriculture occupies three-fourths of the entire population of the United States, and constitutes an equal proportion of its wealth. Agriculture furnishes bread and meat, vegetables, fruits, horses, cattle, &c., not only for our own nation, but for a vast population abroad. Indeed, it is probable that our *gratuitous* agriculture saved as much human life in foreign lands last season as our artillery destroyed, and at an expenditure of one per cent. on the cost of the latter; while the total sales abroad of the surplus of the former would about offset the expense of one year's expenditure of our present military establishments. Agriculture, too, is in its infancy, and needs aid and encouragement, while war had its masters and proficients from its first professors, Cain and Nimrod, to the military chieftains of the present day. Gifted minds they have been too, adepts in the art, skilful and apt to teach; and so successful have been their efforts that they have monopolized nearly all the glory of every passing age. Surely then, agriculture, which occupies so many hands, pays so large a portion of the nation's taxes, confers so large benefits, that has been so much neglected, and is yet so weak and puny, while artillery is so rampant and strong, surely agriculture must command some distinguished patronage and support from a government self-dubbed "the most enlightened on earth."

But softly, gentle readers, you are getting in advance of our national government; the history of the present day records no such policy as this. Turn over the folios of our national statutes, and you will find the record of no such law. Consult the files of Executive State Papers, and since the days of the illustrious Washington, you will hardly find the subject alluded to. Peruse the speeches of our legisiative Solons, and you will discover they have wasted no time on this subject. Not one penny of the $30,000,000 of our national revenue annually collected from the pockets of our farmers, has ever been appropriated to the endowment of an Agricultural College, or the promotion of the agricultural education of our youth during the whole 50 years our present national government has had an existence. Even demagogues and pot-house politicians do not deem it necessary to talk to "Bunkum" in this view; they wisely scorn to consider it even good "gammon." Other subjects are abundant, that will much better repay the expenditure of bad breath and windy nothings; the theme of agriculture and attention to its progress or advancement is not popular enough even with its own millions of self-considered, intelligent delvers, to be deemed worthy a passing thought. How much less then should it receive the munificent appropriations so unhesitatingly accorded to a military academy, or even one ship of war out of a hundred! Yet farmers support the army and navy, nor do they ask their representatives when they return from a session's carousal, what they have done for the interest of agriculture?—Continue, most sagacious deputies, to lay on the burdens upon the backs of your sapient constituency—the benefits are reserved for a more discreet generation.

JACQUES.

DR. J. P. KIRTLAND, it is announced, will deliver an address at the exhibition of the Cuyahoga County Agricultural Society, at Newburg, on the 2d Wednesday in October. There will certainly be a crowd.

☞ *The Sale of Judge Holt's Fine Cattle* is postponed to *Thursday*, the 28th of October, See advertisement.

SAGACITY OF A HORSE.—Two horses belonging to Mr. Samuel W. Tree, of Springfield, strayed away on Thursday, and no trace of them was discovered until Wednesday, when he found one of them near town. Finding all search for the other ineffectual, he at length hit on the expedient of letting the horse he had found, discover the other. He mounted and gave the reins to the animal, who pursued a devious road through the woods to a lonely thicket about three miles south east of town, where the missing horse was found, tied and *gagged*.—*Springfield Republic.*

OLD COLUMBUS NURSERY.

THERE can be found at this *Old Establishment*, the largest collection of trees, of the *choicest kind of fruit* that can be found in any other nursery in the West. I have also on hand a large lot of evergreens, ornamental trees, shrubs, grape vines, &c. &c. Also 200 European mountain ash trees six feet high, one of the handsomest of the hardy ornamental trees.

Entrance to the nursery north end of Third street.

September, 1847. LAFAYETTE LAZELL.

English News, Markets, &c.

The latest news from England, (to the 19th ult.) is not at all favorable for the grain and flour trade. Prices had continued to decline, and heavy failures had taken place among importing merchants, causing quite a commercial panic. The harvest was progressing favorably, and immense quantities of wheat had arrived from the Baltic and Mediterranean ports. The papers speak of some appearance of the potato rot in Ireland and Scotland, also in some parts of England, but it was not thought it would do extensive injury. The time of the greatest danger was not past, however, and we shall not be surprised if the next steamer, (now due) brings intelligence of very extensive injury to the potato crop. Should this be the case, it will give more activity to the wheat and flour trade.

The Markets.

CINCINNATI, *Sept.* 14.—The flour and grain market has been quite dull of late. Price of flour $4.06 @ 4,12½, to 4,25. Wheat 75 cts.; corn 30 @ 32; oats 22 @ 23 cents; potatoes 20 @ 25 cts.; apples 50 @ 75 cts. per bu. Pork, bacon and lard, are without change—little doing. Butter continues at 10 @ 11 cents for packers, to 18 @ 20 cts. in market. Cheese, for shipment, 6¾ @ 7 cts. ℔ lb. Eggs for packing 6 cts.—in market 7 @ 8 cts. per dozen. Cattle, good to fine, 4,50 @ 475 ℔ 100 lb net.

Hogs.—The papers state that contracts were made the past week, for 700 head Corn fed, to average 200 lb, deliverable in November, at $4; and 100 head of still-fed, deliverable in November and December—at $4 ℔ 100 lb net. [We have heard of one or two contracts in this region recently, at $4.—*Ed. O. Cult.*]

CLEVELAND, *Sept.* 11.—Flour, nominal, 4,75 ℔ bbl.; wheat brings 92 @ 94 cts.: corn 45 cts.; oats 20 cents ℔ bushel.

SANDUSKY, *Sept.* 11.—Flour 4,75; wheat 75 @ 80; corn 40 @ 42; oats 18¾.

NEW YORK, *Sept.* 14.—(By Telegraph,)—Genesee and Ohio flour 5,25 @ 5,37½ prime wheat 1,15; mixed corn 65, and prime yellow 69 cts.; mess pork 14,50—prime 11,50 ℔ bbl.

SHEEP AT AUCTION.

PERKINS & BROWN, have between two and three hundred Bucks, and probably about as many Ewes more than they wish to winter, which they will sell at auction, on Tuesday, the 19th of October.

TERMS CASH.

Their Sheep have all been selected and bred with particular regard to constitution, length, thickness, and fineness of fleece, and would greatly improve the character of most of the flocks in the country.

Akron, Summit county, Ohio, Sept. 6, 1847.

FRUIT AND ORNAMENTAL TREES

THE subscribers respectfully solicit the attention of fruit growers and dealers in trees, to their large stock offered for sale the ensuing autumn and next spring, consisting in part of

FORTY THOUSAND APPLE TREES,

Of the most esteemed varieties, from four to eight feet high, at $12 to $20 per 100; and $100 to $150 per $1,000. 8,000 trees of the Northern Spy, (one of the very best long keeping apples known) five to seven feet high, 37½ cents each, or $25 per 100; three or five feet high, 25 cents each, or $18 per 100. 1,000 trees of the Early Joe, (a new and delicious summer apple; ripens August and September,) strong yearling trees 25 cents each or $2 50 per dozen. A number of select varieties are worked on Paradise stocks, adopting them to small gardens. These are one year from bud, of vigorous growth

TWENTY THOUSAND PEAR TREES,

Of various sizes, from three to seven feet high, embracing upwards of 200 of the best varieties to be found. 6,000 of these are on quince stocks. (mainly one year from the bud but very vigorous,) just right for training as Dwarfs, Espaliers, and Pyramids. A few hundred trees each of the Swan's Orange or Onondaga, and the Belle of Brussels, (two unrivalled large rare fruits, mostly strong yearlings, at $1 each.

FIFTEEN THOUSAND CHERRY TREES,

From four to nine feet, of the finest sorts. 5,000 of them being 2 years old from the bud, with fine heads. Price $25 to $40 per 100. A few hundred fine trees can be supplied, budded on the Cerasus mahaleb, forming dwarf trees adapted to garden culture.

TWELVE THOUSAND PEACH TREES,

Vigorous and free from all diseases, of 25 best market sorts; at $12 to $18 per 100, and $100 to $150 per 1,000.

Also, a large stock of all the other hardy fruits, as well as

ORNAMENTAL TREES, SHRUBS, ROSES, &c. &c.

At low rates by the quantity. The correctness of every article guarantied.

Orders promptly executed, and trees and plants packed for safe transmission to any part of the United States, Canada or Europe Priced descriptive catalogues of nursery and green house departments sent gratis to post paid applications.

Orders from the West should be sent as early as possible, that we may be able to forward at the earliest moment, that trees can safely be removed.

Packages reach Buffalo in 6 hours from this place, and our agent there places them on board the steamboats, so that there is no chance for delay. ELLWANGER & BARRY,

Mount Hope Garden and Nursery, Rochester, N. Y.

September, 1847.

CORN FOR SALE.

300 ACRES near Dublin, Franklin county. Apply to GEO. W. DUN,

August 24, 1847.—3t. *Chillicothe.*

CITY NURSERY.

25,000 trees of the choicest fruit for sale at the city nursery, consisting of apples, pears, quinces, cherries, plums, apricots, peaches, nectarines, almonds, grape vines, gooseberries, currants, raspberries, strawberries, &c., &c.

Hardy ornamental trees, shrubs and plants, green house plants, &c.

All orders punctually attended to.

Columbus, Sept. 8, 1847. LATHAM & LAZELL.

PRINCE'S LINNÆAN BOTANIC GARDEN AND NURSERIES, FLUSHING, N. Y.

WM. R PRINCE & CO, successors of Wm. Prince, and sole proprietors of his great collection of Fruit Trees, &c., will transmit their New Descriptive Catalogues (36th edition) with prices, to post paid applicants—to purchasers gratis, and to others at $1 per sett. They comprise, in addition to size, color, quality, &c., *the glands and blossoms of every peach.* The specimen grounds contain 2,000 varieties of fruits, and the trees sold are invaluable to new nurseries for their superior accuracy. A Wholesale Catalogue for nurseries, with reduced prices. Of fruit trees, 4,000 can be supplied in a bearing state, on pear and Portugal quince, and 25,000 of the usual size.

N. B.—The public are cautioned against a deceptive use of our name and title by a man named Winter.

September 15, 1847.

MARIETTA FEMALE SEMINARY.

THE SEMINARY YEAR will consist of four terms of eleven weeks each. The present Autumn term will commence on Wednesday, the 8th day of September. The Winter term, on the 24th day of November—followed by a vacation of *two* weeks, at the close of which will commence the Spring term—followed by the Summer term, which will close with a public examination, on the last Tuesday of July.

The studies here pursued are adapted to pupils of every grade of scholarship, from the alphabet to those *advanced sciences* taught in our best High Schools, and are conducted by four permanent Teachers, besides a Music Teacher and two assistants.

In the advanced classes, besides a thorough course in the ordinary English branches suited to lay the foundation for a more extended course, as well as to *qualify teachers* for our common schools, the following branches may be pursued:

Nat and Int. Philosophy, Chemistry, Geometry, Algebra, Rhetoric, Moral Sciences, Evidences of Christianity, Butler's Analogy, Composition, and several other English studies of a higher order, with the Languages.

In the primary Department, a thorough course of instruction is given in Rhetorical Reading, Spelling and Defining, Writing and Drawing, Mental and Written Arithmetic, History, English Grammar, Composition, and Needlework.

In the Elementary Department, pupils are instructed in the elements of Reading, Spelling and Definitions, Mental Arithmetic Geography, English Grammar, Writing, History and Needlework.

Calisthenics and Singing are combined in all the Divisions of the School.

Tuition in the Advanced Department,	$5 00 per term.
" " Primary "	3 50 "
" " Elementary "	2 50 to 3 50
Music on the Piano,	10 00
Latin and French,	2 00

Boarding, washing, fuel and lights, 1,50 to 2,50 per week.

Pupils may enter the Advanced Classes at any time when prepared to sustain themselves in the studies there pursued.

Tuition to be paid in advance.

Young Ladies from abroad are received as boarders into families interested in the advancement of Female Education, where may be enjoyed all the social advantages of home.

The patrons of the Seminary are cordially invited to attend any of the School Exercises, at such hours as may best suit their convenience, assured that such visits will be no interruption to the classes.

L. TENNEY, *Superintendent.*

Marietta, September 1st, 1847.—3t.

COLUMBUS FEMALE SEMINARY.

BOARDING AND DAY SCHOOL FOR YOUNG LADIES.

Trustees:

Judge J. R. Swan, N. H. Swayne, Esq.,
J. W. Andrews, Esq., Mr. Joel Buttles,
P. Sisson, M. D., A. F. Perry, Esq.,
Mr. Adams Stewart, Mr. John Noble,
O. Follett, Esq.

PRINCIPALS,

MR. & MRS. SCHENCK.

THE NINTH TERM of this Institution will commence on Wednesday the 31st August next. For circulars and farther information, address the Principals at the Seminary on Town street, West of High Columbus, O.

Aug. 8th, 1847.

Ancient and Real Linnæan Botanic Garden and Nursery,

Late of WILLIAM PRINCE, deceased,

FLUSHING, L. I., NEAR NEW-YORK.

THE new proprietors of this celebrated NURSERY, known as *Prince's*, and exclusively designated by the above title for nearly fifty years, offer for sale every description, *including the newest and choicest varieties*, of

Fruit and Ornamental Trees,

SHRUBS, VINES, PLANTS, ROSES, &c., the *genuineness* of which may be depended upon; and they will unremittingly endeavor to merit the CONFIDENCE and PATRONAGE of the Public, by INTEGRITY and LIBERALITY in dealing, and MODERATION in charges.

Descriptive Catalogues *gratis* on application *post paid.*

WINTER & CO., *Proprietors.*

September 1st, 1847.

SALE OF IMPROVED SHORT HORNS.

THE subscriber will sell on Friday, the 29th DAY OF OCTOBER next, at TROY, IN THE COUNTY OF MIAMI, from thirty to forty head of improved Durham Cattle, consisting of bulls, cows, heifers, and calves. About half of the stock are thoroughbred—pedigrees recorded in the English and American Herd Book. The other half, crosses of the Durham and Holderness breeds. The sale will be positive, the highest bidder will be the purchaser; the subscriber reserving bids on not exceeding five of the animals.

TERMS.—A credit of ninety days will be given—paper with security, made payable at the Piqua, Troy, or Dayton Banks, at the option of the purchaser.

GEO. B. HOLT.

Dayton, August 23d, 1847.